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ABSTRACT

As one of the components of the Project ACTIVE (All Children Totally Involved Exercising) Teacher Training Model Kit, the manual is designed to enable the educator to organize, conduct, and evaluate individualized-personalized programs for children (kindergarten through high school) with communication disorders. An introductory chapter covers definitions and student and teacher behavioral objectives. Chapter II provides descriptions of the general problems manifested by children with communication disorders, suggested guidelines for the teacher, and a description of informal instruments used to assess individual student progress. A systematic procedure for assessing student progress is explained in Chapter III. Outlined in Chapter IV are suggestions and student learning experiences for visually handicapped, hard of hearing or deaf, and aphasic children. Chapter V focuses on the evaluation of student progress at the end of a specific block of time so that a decision can be made regarding subsequent programing. A final chapter includes sections which describe activities addressed to the following motor and physical factors: gross body coordination, balance and postural orientation, eye-hand coordination and accuracy, eye-foot accuracy, arm and shoulder strength, abdominal strength, explosive leg power, and cardiorespiratory endurance. Appended are such materials as a guide to the evaluation of posture and body alignment and a list of supply and equipment needs. (SBH)

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COMMUNICATION DISORDERS

An Individualized Program

Thomas M. Vodola, Ed.D.
Project Director
Project ACTIVE: All Children Totally InVolved Exercising

Project Number: 72-341, Title III-IV(C), ESEA

MEMO FROM THE COMMISSIONER

"On behalf of the Department of Education, State of New Jersey, I wish to bring Project ACTIVE to the attention of educators throughout the nation. The program has made a significant contribution to both physical and special education in New Jersey and thus will be of interest to both educators and parents."

Fred G Burke

Dr. Fred G. Burke
Commissioner of Education
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	Paramus
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PREFACE

The development of the Project ACTIVE manual, *Adapted Physical Education: Communication Disorders* was a cooperative effort of the Township of Ocean School District and the Office of Program Development, Division of Research, Planning, and Evaluation, Department of Education, State of New Jersey.[1] The manual provides a sound basis for individualizing a physical education program for students who evidence communication problems.

In 1975, the Project ACTIVE manual, *Adapted Physical Education: Communication Disorders* was validated by the standards and guidelines of the United States Office of Education as successful, cost-effective and exportable. As a result, the program is now funded through the New Jersey Elementary and Secondary Act, Title III program to offer interested educators the training and materials required for its replication. This manual was prepared as part of the program's dissemination effort.

The purpose of Title III-IV(C) is to encourage the development and dissemination of innovative programs which offer imaginative solutions to educational problems. Project ACTIVE achieved this purpose by disseminating its innovative program to 500 teachers and paraprofessionals through 24 regional workshops. Further, as of June 1975, 76 school districts and agencies in the State of New Jersey have adopted or adapted some aspect of the individualized physical education program in accordance with the educational needs of their districts – involving more than 10,000 individuals.

This manual has been prepared as one of the components of the Project ACTIVE Teacher Training Model Kit. Other component parts of the model kit which are available to those who are interested in adopting or adapting the projects individualized-personalized instructional concept are cited below:

- Developmental Physical Education: Low Motor Ability
- Developmental Physical Education: Low Physical Vitality
- Adapted Physical Education: Postural Abnormalities
- Adapted Physical Education: Nutritional Deficiencies
- Developmental and Adapted Physical Education: A Competency-Based Teaching Training Program
- Adapted Physical Education: Motor Disabilities or Limitations
- Adapted Physical Education: Breathing Problems
- Teacher Training Filmstrip: A Competency-Based Approach
- Motor Ability Filmstrip: An Individualized-Personalized Approach

These manuals have been validated for national dissemination and may be purchased from the project director.

[1] Adapted Physical Education is defined as that aspect of the physical education program which addresses itself to the provision of enrichment of physical activities for those students who manifest medically-oriented problems.

Districts interested in establishing individualized physical education programs for the handicapped need assistance. The following dissemination-diffusion services are provided to aid implementing schools during the initial phases of program installation:

- Teacher Training Workshops
- Individual Pupil Time Prescriptions
- Certificates of Merit for Pupil Achievement and/or Improvement
- Monthly Issue of the ACTIVE Newsletter
- Test Instruments to Assess Pupil Performance
- Development of School Norms
- Other General Consultant Service

For additional information regarding the Model Kit, other awareness materials, or available services, the reader is requested to contact:

Dr. Thomas M. Vodola, Director
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The manual, *Adapted Physical Education: Communication Disorders* is based on the Developmental and Adapted (D&A) Program developed by the Project Director in the Township of Ocean School District, Oakhurst, N.J.

Appreciation is expressed to the Township of Ocean Board of Education, Superintendent of Schools, the D&A Council, teachers, students, and parents for their total commitment to the program. Special appreciation is accorded to the Township of Ocean Physical Education Department for their unstinting support and effort.

To Prentice-Hall, Inc., a special vote of thanks for granting the Project Director permission to include materials from his text, *Individualized Physical Education Program for the Handicapped Child.*

Sincere appreciation is also accorded to the Advisory Council members who assisted in the reviewing and editing process: Mr. Sal Abitanta, Consultant, New Jersey State Department of Education, Dr. David Bilowit, Professor, Kean College of New Jersey, Mrs. Edwina M. Crystal, School Psychologist, Township of Ocean School District, Mr. Al Daniel, Coordinator, Developmental Physical Education, Cherry Hill School District, Dr. George Gerstle, Assistant Professor, Glassboro State College, Mr. Paul Porado, Program Director, Office of Special Services, N.J. Department of Education, and Dr. Marion Rogers*, Professor, Glassboro State College. Also special thanks to the New Jersey Chapter of the American Academy of Pediatrics; Dr. Raymond Weiss, Professor, Department of Health, Physical Education and Recreation, New York University; and Dr. Julian U. Stein, Director, Program for the Handicapped, American Association of Health, Physical Education and Recreation, Washington, D.C.

To Mrs. Jean Harmer, Mrs. Mary Kesperis, Mrs. Dorothy Smith, and Mrs. Ellen Kearney, gratitude and appreciation for their painstaking devotion to the development of the intermediate "product."

Grateful appreciation is expressed to the New Jersey State Department of Education and the Title III staff members for their continued assistance and support. To Dr. Lillian White-Stevens, a deep debt of gratitude for her editing expertise.

Special thanks are extended to the Project ACTIVE cadre team, for the many hours they devoted to assist in the restructuring of the final product. The synthesizing team consisted of: Mrs. F. June Graf, Livingston School District; Mr. Robert Fraser, Wayne Township Public Schools; Mr. Robert Ekblom, Madison Township Public Schools; Mr. Thomas Cicalese, Morris Hills Regional District; Mr. Tim Sullivan, Montclair State College; Mr. G. "Buzz" Buzzelli, Monmouth College; Mr. Roy Lipoti, New Lisbon State School, Garden State School District; Mr. Edward Korzun, Orange Public School System; Mr. Thomas Pagano, Township of Ocean School District; Mr. Lawrence A. Guarino, New School District; Mr. Al Daniel, Cherry Hill School District; and Dr. David Bilowit, Kean College of New Jersey. Credit for the art work is accorded to Mr. Athan Anest, Wall Township School District.

*Retired as of July, 1973.

To the many authors and publishers who permitted the use of their materials in the manual, sincere appreciation.

Finally, to Emil Praksta** a representative of the South Jersey Educational Improvement Center, the co-director of this project and a personal friend, my sincere appreciation for his constant stimulation, support, and critical review of all materials.

A final note: Although the aforementioned "team" made many constructive suggestions which were included in the manual, I accept full responsibility for the final product, and any criticisms thereof, because all final decisions were a reflection of my personal philosophy.

Thomas M. Vodola, Ed.D.
Title III, Project Director

**Recently deceased

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INTRODUCTION

CHAPTER ONE

INTRODUCTION

OVERVIEW

Adapted Physical Education: Communication Disorders has been developed to serve two purposes:

1. To provide a manual for training physical educators, special educators, recreation teachers and paraprofessionals so they can achieve the minimal competencies necessary to implement an individualized physical activity program for students in grades K-12.
2. To provide practitioners in the field with a structured procedure for individualizing and personalizing a physical activity program for students who manifest communication problems.

During 1974-75, several research studies were conducted to compare the relative effects of individualized physical education and traditional physical education programming on students who evidenced a variety of handicapping conditions. Subjects were matched on the basis of age, sex, pre-test scores, and handicapping condition and placed in an experimental group (individualized adapted physical education involvement), and a control group (traditional physical education and/or classroom activities). The post-test data revealed the individualized program as superior to traditional physical education. Based on these findings, the program was validated according to the standards and guidelines of the United States Office of Education as innovative, successful, cost-effective, and exportable.

The manual provides the teacher with a sequential approach to initiating an individualized and personalized physical activity program. This chapter contains a definition of terms and criterion-referenced objectives which provide a basis for evaluating student and teacher performance. Subsequent chapters detail the individualized process via the acronym T.A.P.E., i.e., test, assess, prescribe, and evaluate.[1] A detailed description of the step-by-step procedures necessary for program implementation, is presented in the flow chart and activity checklist in Appendix A.

DEFINITIONS

Since this manual provides an *individualized-personalized* physical education program for children with *communication disorders*, definitions of the three terms are warranted:

Individualized Instruction

Diagnosis and prescription are the basic ingredients necessary for the provision of individualized instruction. The strategies involved include: formal and informal testing; formative and summative assessment; prescription; and evaluation.

Personalized Instruction

Personalized instruction deals with the humanistic aspects of the teaching-learning process. It stresses not only the development of teacher-pupil and pupil-pupil rapport but also the enhancement of the child's self-concept.

Communication Disorders

Communication disorders may be defined as physical handicaps which impede the functioning of one or more of the special senses. Under this classification fall the deaf, the hard of hearing, the blind, the partially sighted, the autistic, and those with various speech impediments.[2]

STUDENT BEHAVIORAL OBJECTIVES[3]

1. The student demonstrates an improvement in physical fitness and motor ability (K-12). Evaluative criteria:

[1] Frank Hayden, *Physical Fitness for the Mentally Retarded*, p.9.

[2] Thomas M. Vodola, *Individualized Physical Education Program for the Handicapped Child*, p. 81.

[3] Appendix B provides a sample copy of the certificate awarded to children who attain their program goals.

10% improvement in those test items he can perform. (Student performance is assessed by the teacher.)

2. The partially-sighted or blind student demonstrates improved posture (K-12). Evaluative criteria: analysis of pre- and post-posture screening test results – 10% improvement. (Student performance is assessed by the teacher.)
3. The blind student demonstrates an increased kinesthetic awareness of total body position in executing a task (grades 4-12). (Student performance is assessed by the teacher.)
4. The blind student demonstrates an increased kinesthetic awareness of the proper arm position necessary to propel an object accurately (grades K-12). Evaluative criteria: 10% improvement in target throwing test based on pre- and post-test score comparison. (Student performance is assessed by the teacher.)
5. The hard-of-hearing or deaf student with balance problems, but no significant semi-circular canal dsyfunction, demonstrates improved balance (K-12). Evaluative criteria: 10% improvement in balance beam performance based on pre- and post-test scores on tapered balance beam (i.e., distance walked and length of time balance is maintained).
6. The autistic child demonstrates socialization, awareness and the ability to perform tasks and activities as directed (K-12). Evaluative criteria: initiation, or increase in time, of play with other children; allows physical contact with adults or other children; and actively makes contact with others, e.g., holds hands during activity.
7. The aphasic student displays both a desire to participate, and an improvement in physical activities (K-12). Evaluative criteria: increased time spent in the activities during involvement in the D&A Program;[1] and improved performance in activities as evidenced by pre- and post-test motor and physical fitness scores and/or teacher assessment.
8. The student evidences a desire to participate in physical activity modified according to his needs (grades K-12). Evaluative criteria: increased student participation in the activities after school and evidence of personal satisfaction. (Student performance is assessed by the teacher.)

TEACHER BEHAVIORAL OBJECTIVES[2]

The teacher:

1. Devises tests and assesses the peripheral vision and depth perception of a partially-sighted student. Evaluative criteria: materials to be distributed in class.
2. Demonstrates and teaches two tasks and activities to enhance peripheral vision and depth perception. Evaluative criteria: Tasks and activities that enhance "span" of vision and assessment of different distances.
3. Devises a test to assess a blind student's awareness of his body in a static position. Evaluative criteria: measurement of body part in a requested position; determination of degree of error from norm.
4. Demonstrates and teaches one task or activity to enhance the kinesthetic "feel" of an arm, leg and/or the total body in a movement pattern. Evaluative criteria: use of sensory feedback to aid the subject in developing the kinesthetic awareness of his body in a movement pattern.

Fig. 1-1 Trainee Practicum Experience
(Teacher Training Program, Silver City, New Mexico)

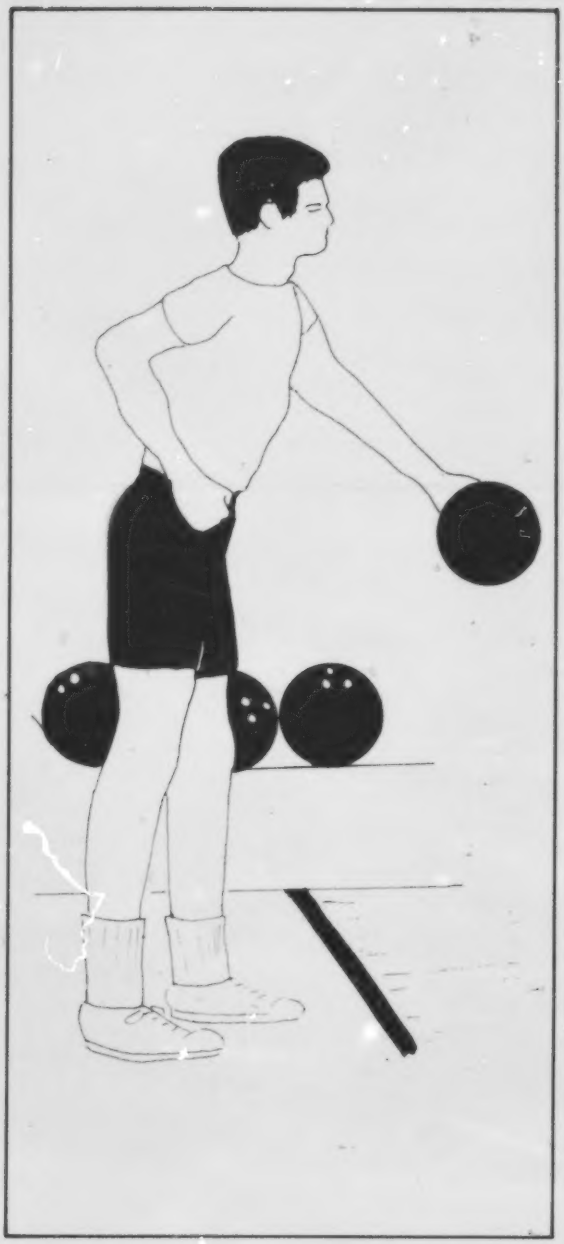
5. Modifies and teaches one game for children manifesting each of the following disabilities: the blind and partially sighted; the deaf and hard-of-hearing; the breathing disabled; and those with motor disabilities or limitations. Evaluative criteria: games modified by reducing the size of the playing area, using lighter equipment, slowing down moving objects, changing the rules, and providing additional periods.
6. Demonstrates proficiency in the administration of the tapered balance beam test. Evaluative criteria: testing materials distributed in class.
7. Demonstrates three techniques which may enhance the awareness – socialization functioning of the autistic and aphasic student. Evaluative criteria: techniques to be demonstrated and explained in class.

[1] D&A refers to the Developmental and Adapted Physical Education Program which is designed to provide an individualized physical activity program for children with any of a variety of handicapping conditions.

[2] Appendix C provides a sample copy of the certificate awarded to Project ACTIVE trainees who achieve 80% of the course competencies.

TEST PROCEDURES

TAPE



CHAPTER TWO

TEST PROCEDURES

A
P
E

The prime responsibility for the classification of, and prescription for, students with communication disorders is vested in the family or school physician, or other appropriate medical personnel. However, once the student has been so classified and referred for program involvement, the physical educator can be of invaluable assistance by utilizing informal test instruments which indicate pupil progress.

Chapter II provides descriptions of the general problems manifested by children with communication disorders; suggested guidelines for the teacher; and a description of informal instruments used to assess individual pupil progress.

GENERAL PROBLEMS AND SUGGESTED GUIDELINES

Partially-sighted and Blind

A student with visual acuity of 20/200 or less in the better eye is considered legally blind. The figure 20/200 means that the student's vision at 20 feet from the object is the same as normal vision at 200 feet.

A student is classified as partially-sighted if he or she can perceive movement, light, and form. The partially-sighted have a visual acuity between 20/70 and 20/200 in the better eye after correction. Within this category are also those students with some restricted peripheral vision (tunnel vision).

Blind or partially-sighted students tend to display faulty body mechanics, body control, static balance, coordination, and a general inability to perform motor tasks. Many of the problems result from overprotection, with limited opportunities to move about and explore the environment. Consequently, some blind students are very tense; walk rigidly with their heads tilted backward; take short, faltering steps; and may exhibit other characteristics of poor posture.

The placement of the visually handicapped child in a physical education or activity program depends upon the nature of the child's problem(s), the type of program, and the physical environment provided. A visually handicapped student with very poor mobility, poor coordination, or a very low intelligence may derive more benefit from the D&A program. Some partially-sighted may be placed in a regular class; others with manifest characteristics of blind children, or apprehensions because of poor vision, will benefit from a special program.

The blind student must be provided with an individualized prescriptive program which, to meet his specific needs, should focus on those types of activities which will improve the above-mentioned problems.

Hard-of-hearing and Deaf

Persons with hearing impairments are classified as either hard-of-hearing or deaf. The hard-of-hearing can hear either with or without a hearing aid enough speech to learn how to speak; the deaf cannot hear enough to comprehend the spoken word.

Students with hearing problems usually fall into two categories: congenital, indicating the hard-of-hearing or deafness was present at birth; or, acquired loss, indicating the hard-of-hearing or deafness resulted from disease, accident, or injury.

Deaf students can learn speech and lip reading at the elementary school level. The teacher must remember to face the deaf student when speaking to enable him to lip-read. The hard-of-hearing students can be taught to speak either by the visual tactile method or by use of a hearing aid. In some cases, the hearing device may not be practical for constant use if amplification results in confusing distortion of sound.

It should be noted that for these students a major avenue of communication is eliminated or severely impeded. When the impairment is congenital, the normal acquisition of language is arrested and subsequently the thinking processes may be affected. Further, the students tend to feel isolated and dependent.

The student with peripheral deafness may manifest a balance problem due to reduced functioning of the semicircular canals. The instructor should limit climbing and apparatus work. The balance problem may be corrected wholly or to some degree by surgery and medication. Care should also be exercised when the students are exposed to low temperature, excessive wind and water. For such circumstances, it is recommended they wear proper clothing and ear plugs.

Autistic

Autistic children cannot be categorized as having hearing dysfunctions even though they manifest auditory problems. Predominantly a problem of males, autism is usually exhibited at birth, or during the early childhood years. Some symptoms associated with autism may be: feeding problems; constant crying or absence of crying; fear of strangers, repetitive motion such as rocking or spinning; sleeping problems; difficulties in toilet training; and unusual or no speech patterns. (Refer to Wing[1] and Dewey[2] for more detailed information regarding the behaviors, characteristics and problems of the autistic child.)

The autistic child can learn and would benefit from involvement in a D&A program. However, progress may be slow or at a standstill for months at a time and will require extreme patience and constant individual attention by the teacher.

The autistic child, usually non-communicative, should be scheduled in the D&A program primarily because he needs individualized attention. He tends to manifest some of the following behavior patterns and characteristics:

1. A facial countenance devoid of emotions.
2. Periodic or complete detachment from the world of reality.
3. Resistance to perform many requested tasks.
4. Preference for isolationism: he will avoid groups and physical contact and often prefers to work or play alone.
5. Inappropriate emotional reactions.

Fig. 2-1 Preference for Isolation
(Courtesy of the Search Day Program, Ocean, New Jersey) [3]

Aphasic

The aphasic child will have communication problems, such as expressive (inability to say what he wants to) or receptive (inability to understand spoken speech). It is, therefore, necessary to augment all directions, no matter how simple, by demonstration. Then test by having the child do what is required to be sure it is correctly understood.

FORMAL AND INFORMAL TEST INSTRUMENTS

The appraisal procedures recommended include the administration of:

1. The Township of Ocean Physical Fitness Test (norm-referenced)
2. The Township of Ocean Physical Fitness Test (criterion-referenced)

[1] Lorna Wing, *Children Apart: Autistic Children and Their Families*, 31 pp.

[2] Margaret A. Dewey, *Recreation for Autistic and Emotionally Disturbed Children*, 18 pp.

[3] Special thanks to Mr. Ken Appenzeller, Director of the Search Day School for Autistic Students, the Board of Directors, Ms. Jane Boyle (photographer), and the parents for providing, and granting permission to include the pictures of their children on the cover and section dividers of this manual.

3. The Township of Ocean Motor Ability Test (norm-referenced)
4. The Township of Ocean Motor Ability Test (criterion-referenced)
5. The New York Posture Test[1]
6. The Modified Iowa Posture Test[2]
7. The Kinesthetic Target-Throwing Test
8. The Pictorial Self-Concept Test (grades K-3)[3] A Picture Choice (grades K-1),[4] Q-Sorting Self-Appraisal (grades 4-8),[5] or Wear Attitude Inventory[6]

TEST INSTRUMENTS AND PROCEDURES[7]

Physical Fitness Norm-referenced

Have the student perform as many of the test items as possible (while cognizant of the safety factor).

Test directions, physical fitness.

Test Item No. 1: *Static arm hang*
Factor: Arm and Shoulder Strength

After demonstration, the subject is assisted to the starting position (with arms flexed and chin above bar). The subject is not allowed to touch any part of his head to the bar, to kick, struggle, or move his body. Palms are to face away from the body. Special efforts are to be made to keep the subject in the starting position, especially as they begin to tire. The score recorded is the *number* of seconds from the signal "go" (starting position) until the arms are "locked" completely straight (finished position).

Attempts: 1
Scoring: Total suspension time in seconds

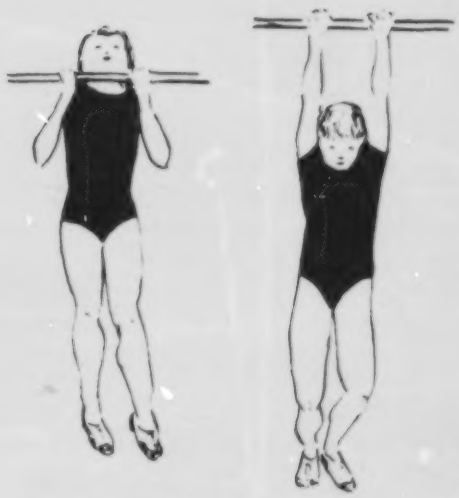


Fig. 2-2 Static Arm Hang

Test Item No. 2: *Modified sit-ups (curl-ups)*
Factor: Abdominal Strength

After demonstration, the subject assumes a supine position on a mat, with arms straight and palms resting on the thighs. On the command "go," the subject raises his head and shoulders and slides his hands forward until he touches the upper edges of his kneecaps; he, then, immediately returns to the supine position. To increase reliability and objectivity, the instructor places his hand across the child's kneecaps and counts as the child touches his arm.

The subject is not permitted to "bounce" up, raise hands off legs, or rest between curl-ups (stress a steady rhythm). The score recorded is the number of times the student touches the extended arm properly. Repeat the count when performing incorrectly.
Attempts: 1
Scoring: Total correct curl-ups

Fig. 2-3 Modified Sit-Ups

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[1] *New York State Physical Fitness Test*, pp. 13-15.

[2] M. Gladys Scott and Esther French, *Measurement and Evaluation in Physical Education.*

[3] Angelo S. Bolea, Donald W. Felker and Margaret D. Barnes, "A Pictorial Self-Concept Scale for Children in K-4" *Journal of Educational Measurement*, VIII, No. 3, (Fall, 1971) pp. 223-224.

[4] *Attitude Toward School*, Grades K-12, Revised Edition (Los Angeles, Calif.: Instructional Objectives Exchange, 1972), pp. 48-61.

[5] "The Behavioral Q-Sort As A Diagnostic Tool," Roger Kroth, in Academic Therapy, Vol. 8, No. 3, Spring, 1973, pp. 317-330.

[6] C.L. Wear, "Construction of Equivalent Forms of An Attitude Scale," *Research Quarterly*, XXV (1955), pp. 113-119.

[7] The instruments presented will have to be modified in accordance with the types of handicapping condition encountered. It may be that some items must be deleted or modified to some extent, e.g., having a blind child run the 200 yard dash with a "buddy," or alongside a guideline. However, once modified, the instrument will aid the teacher in assessing individual needs and performance.

Test Item No. 3: *Standing broad jump*
Factor: Explosive Leg Power

After demonstration, the subject stands with his toes behind the take-off line, his feet several inches apart. He is to jump as far forward as possible. Before jumping, he bends his knees and swings his arms forward. No restrictions are placed on his arm movements. However, the student is informed the jump will not count if he falls backward. The score recorded is the best jump of three attempts, measured and *recorded in total inches.* Measurements are taken from the back of the take-off line to the back of the heel nearest the take-off line. The scorer should stand to the side of the subject to observe the exact point of contact of the rear heel.
Attempts: 3
Scoring: Best distance recorded in inches

Fig. 2-4 Standing Broad Jump

Test Item No. 4:
200 Yard run; 8-minute run; 12-minute run
Factor: Cardiorespiratory Endurance

a. 200 Yard run, ages 6-11 (grades 1-6)

After demonstration of the sprint start, the subjects are requested to assume the starting position with fingertips behind the starting line. Commands are: "take your mark," "get set," and "go." The instructor should start the the time when the subject "moves" rather than on the command "go." Encourage the students to run at full speed beyond the finish line. If a student does not run as fast as he can, do not record his score, as the time will be invalid. For consistency, run the 200 yard dash in a straight line (preferably on turf). Gym shoes or shoes may be worn; stockings or bare feet are not permitted.
Attempts: 1 or more, if necessary
Scoring: Time in seconds

Fig. 2-5 200 Yard Run

b. 8-Minute run, ages 12-13 (grades 7-8)

(1) Sub-divide the 440 yard track into eight equal sections 55 yards each section. (2) Place a flag marker at each section, e.g., "1," "2," "3," etc. (3) "Pair" all students as "1's" and "2's," prior to testing. (4) On command have all of the "1's" (half the class) run for an 8-minute period. The No. 2's are to keep a record of the distance covered by their partners. (5) At the termination of the 8-minute period, the instructor blows the whistle, terminating the run. The No. 2's report their partner's scores to the recorder, e.g., 3.6 would indicate three complete laps, plus

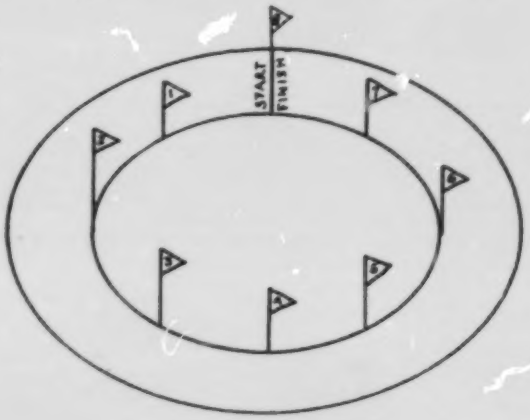

Fig. 2-6 8-Minute Run

the passing of six markers. (Table 2-1 provides a reliable means for converting laps to yards and miles.) (6) Reverse the procedure and have the No. 2's run and the No. 1's act as recorders.
Attempts: 1
Scoring: Total laps, plus flags passed in 8 minutes

c. 12-Minute run, ages 14-18 (grades 9-12) The same test directions as for the 8-minute run except that the students continue running for a 12-minute period.
Attempts: 1
Scoring: Total laps, plus flags passed in 12 minutes

Test scoring. The Township of Ocean Physical Fitness Test Form (Table 2-1) presents items that measure: arm and shoulder strength; abdominal strength; explosive leg power; and cardiorespiratory endurance. The student's raw score in each area, plus anecdotal remarks describing how the task is performed, should be recorded in the appropriate "raw score" column. (Three "raw score" columns have been provided for the recording of test scores administered at periodic intervals.)

The raw scores will later be converted into percentile scores, stanine scores, and a PFI score so that a student's performance can be appraised in terms of his or her age and sex. These procedures will be explained in Chapter III – Assessment Procedures.

TABLE 2-1

PHYSICAL FITNESS TEST FORM (Courtesy of the Township of Ocean School District)

NAME Jane Doe AGE 6 INSTRUCTOR Mrs. P. Galatro
SCHOOL Ocean Township School MALE _____ FEMALE x
GRADE 8 HEIGHT 5' 4" WEIGHT 135
STARTED PROGRAM: Date September 75
COMPLETED PROGRAM: Date _____ SOMATOTYPE Endo-Mesomorph

TEST ITEM	FACTOR	RAW SCORE			PERCENTILE			STANINE		
		Test 1	Test 2	Test 3	Test 1	Test 2	Test 3	Test 1	Test 2	Test 3
Static Arm Hang	Arm Strength	24 sec.	sec.	sec.	60			5		
Modified Sit-Ups	Abdominal Strength	30			20			4		
Standing Broad Jump	Leg Strength	53 in.	in.	in.	4			2		
200 Yard[1] Dash	Endurance	sec.	sec.	sec.						
8-Minute[2] Run	Endurance	1.6			1			1		
12-Minute[3] Run	Endurance									
	Number of Tests							Total Points		
TOTALS	4							12		

PFI = $\frac{\text{Total Stanines} \times 10}{\text{Number of Tests}}$ $\frac{12 \times 10}{4}$ = 30 PFI Score

Anecdotal Remarks

Supports body weight primarily with the right arm. Favors the right side of the body when performing modified sit-ups.

Table for Converting Percentiles to Stanines

Percentile Intervals	Stanines	
97 and above	9	Very High
90–96	8	
80–89	7	High
65–79	6	
35–64	5	Average
20–34	4	Low
10–19	3	
4–9	2	Very Low
3– and below	1	

[1] Administered to students, ages eleven and below.

[2] Administered to students ages twelve and thirteen.

[3] Administered to students ages fourteen and above.

Physical Fitness, Criterion-referenced

This instrument is applicable for those students who have difficulty with comprehension.

Test directions.

TABLE 2-2

BASIC PHYSICAL FITNESS TEST FORM

Name:_____ School:_____ Sex:_____

Age:_____ IQ:_____ Mental Age:_____ Classification:_____

Date:_____ Total Score:_____

Test Item #1: Static Arm Hang	**Factor:** Arm and Shoulder Strength	**Procedure**	Test No. I	Test No. II
0 – Makes no attempt to grasp bar 1 – Hanging position, assisted 2 – Assumes correct hanging position 3 – Assumes hanging position (unassisted) for a minimum of 5 seconds 4 – Assumes hanging position (unassisted) for 10 seconds		Bent arm hang, with overhand grasp. Suspension time is the number of seconds from the signal "go" (starting position) until the arms are "locked" completely straight.		
Test Item #2: Modified Sit-Ups	**Factor:** Abdominal Strength	**Procedure**		
0 – Makes no attempt to rise to a sit-up position 1 – Rises to a sit-up position, when assisted 2 – Raises head off the mat unassisted 3 – Raises head and shoulders off the mat unassisted 4 – Raises body and touches fingertips (arms extended) to kneecaps		Supine position on a mat, with arms straight and palms resting on the thighs.		
Test Item #3: Standing Broad Jump	**Factor:** Explosive Leg Power	**Procedure**		
0 – Makes no attempt to jump 1 – Hops or leaps rather than jumps 2 – Jumps in uncoordinated fashion (without arm swing and knee flexion) 3 – Coordinates arm swing with jump 4 – Bends knees and swings arms forward in unison with jump and lands with knees flexed		Toes behind the take-off line. Measurements are taken from the back of the take-off line to the back of the heel nearest the take-off line.		
Test Item #4: Running	**Factor:** Cardio-respiratory Endurance	**Procedure**		
0 – Makes no attempt to run 1 – Runs only when assisted 2 – Runs and stops in an irregular pattern 3 – Runs the predetermined distance in an awkward manner 4 – Responds on command and runs the predetermined distance with proper form		Runs a predetermined distance, upon command.		
Maximum Score 16 points		Total Score		

Prescriptive Remarks:_____

Test scoring. The instrument provides the teacher with an objective means of identifying specific student behaviors. It also serves the function of assessing pupil performance gains. Score each student on the basis of 0-4 points for each factor and record the total score at the bottom. If all items are performed correctly, a student can achieve a maximum of 16 points.

Motor Ability, Norm-referenced[1]

Have the student perform as many of the test items as possible (while being cognizant of the safety factor).

Test directions. The tester should observe student performance carefully and record anecdotal remarks for all failures so that an individualized program can be prescribed.[2]

Gross Body Coordination

Test Item No. 1: *Walk*
Factor: Gross Body Coordination

Subject must walk at least fifteen feet in a smooth manner. Bilateral coordination of opposite arm and leg is required, i.e., left arm–right foot and right arm–left foot, plus subjective evaluation of gross body coordination.
Attempts: 2 Scoring: Maximum–2 points

Fig. 2-7 Walk

Test Item No. 2: *Creep*
Factor: Gross Body Coordination

Bilateral coordination of opposite hand and knee is required, i.e., left hand–right knee must come forward at the same time and right hand–left knee must come forward at the same time. Subject must creep (hands and knees) at least ten feet (5 x 10 mat) to pass.
Attempts: 2 Scoring: Maximum–2 points

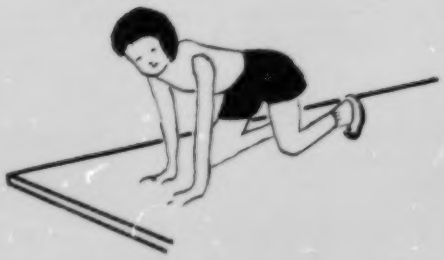

Fig. 2-8 Creep

Test Item No. 3: *Climb-stairs*
Factor: Gross Body Coordination

Subject must climb at least four consecutive steps (twelve inches high) by using alternate footwork. Both feet must not come together on a step, but rather one foot on one step and the next step with the other foot; no support may be given. (Corridor stairs may be used.)
Attempts: 2 Scoring: Maximum–2 points

Fig. 2-9 Climb-Stairs

Fig. 2-10 Skip

Test Item No. 4: *Skip*
Factor: Gross Body Coordination

Subject must skip at least ten feet in a smooth manner (without extra hops). One practice attempt shall be permitted.
Attempts: 2 Scoring: Maximum–2 points

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[1] Modified instrument designed by Donald Hinsendager, Harold K. Jack, and Lester Mann, *Basic Motor Fitness Test for Emotionally Disturbed Children*, pp. 7-11.

[2] Before administering the Motor Ability Test to a child with a medically-oriented problem, be sure you have a medical release form signed by the parent and family or school physician, plus prescriptive activities from the physician.

Test Item No. 5: *March-in-place*
Factor: Gross Body Coordination

To pass, the subject must keep in cadence with the tester who claps cadence of one clap per second (15 seconds) for the first attempt and two claps per second (15 seconds) for the second attempt.

Attempts: 2 Scoring: Maximum–2 points

Fig. 2-11 March-In-Place

Subject's score on gross body coordination is the number of successful accomplishments in ten attempts. All of the gross body coordination skills should evidence total body coordination for a passing attempt.

Maximum total points–Gross Body Coordination–10 points

BALANCE AND POSTURAL ORIENTATION

Test Item No. 1: *Stand–both feet*
Factor: Balance and Postural Orientation

Subject must stand with feet together, arms extended forward from shoulders at a 90 degree angle and eyes closed for fifteen seconds. An unsuccessful attempt is recorded if the subject shifts his feet, or moves arms 15 degrees from the 90 degree position.

Attempts: 3 Scoring: Maximum–3 points

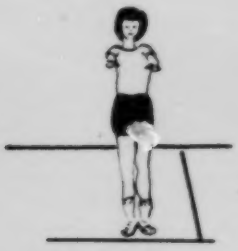


Fig. 2-12 Stand-Both Feet

Test Item No. 2: *Stand right foot*
Factor: Balance and Postural Orientation

Subject must stand on right foot with left foot off the floor and not touch any stable object for fifteen seconds (eyes open). Unsuccessful attempt if subject shifts right foot or touches left foot to right leg, foot, floor, or any other supporting structure before the elapse of fifteen seconds.

Attempts: 3 Scoring: Maximum–3 points

Fig. 2-13 Stand–Right Foot

Test Item No. 3: *Stand–left foot*
Factor: Balance and Postural Orientation

Same directions as for test item number 2 except feet are reversed.

Attempts: 3 Scoring: Maximum–3 points

Fig. 2-14 Stand-Left Foot

Test Item No. 4: *Jump–one foot leading*
Factor: Balance and Postural Orientation

Subject must jump off eighteen-inch high step or bench with one foot in front of the other. No support is allowed and balance must be maintained on landing (no shift of feet). The tester should have the subject jump and land in an area immediately adjacent to the bench.

Attempts: 3 Scoring: Maximum–3 points

Fig. 2-15 Jump – One Foot Leading

Test Item No. 5: *Jump–both feet simultaneously*
Factor: Balance and Postural Orientation

Same procedure as test item number 4 except feet are side by side.

Attempts: 3 Scoring: Maximum–3 points

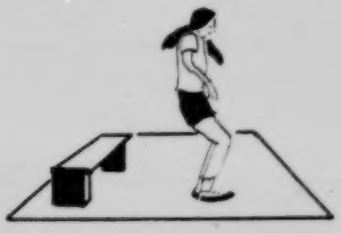


Fig. 2-16 Jump – Both Feet Simultaneously

Test Item No. 6: *Stationary jump–both feet*
Factor: Balance and Postural Orientation

Subject must jump on both feet for at least three jumps without stopping, losing balance, using a support, or stepping on, or out of an 18" square.

Attempts: 3 Scoring: Maximum– 3 points

Fig. 2-17 Stationary Jump – Both Feet

Test Item No. 7: *Stationary hop left foot*
Factor: Balance and Postural Orientation

Subject must hop on left foot for at least three hops without stopping, losing balance, using a support, or stepping on, or out of an 18" square.

Attempts: 3 Scoring: Maximum–3 points

Fig. 2-18 Stationary Hop – Left Foot

Test Item No. 8: *Stationary hop–right foot*
Factor: Balance and Postural Orientation

Same procedure as test item number 7 except the subject hops on right foot.

Attempts: 3 Scoring: Maximum–3 points

Fig. 2-19 Stationary Hop – Right Foot

Subject's composite score on Balance and Postural Orientation is the number of successful accomplishments in twenty-four attempts.

Maximum total points–Balance and Postural Orientation–24 points

EYE-HAND COORDINATION

Test Item No. 1: *Catch*
Factor: Eye and Hand Coordination

To pass, the subject must catch a whiffleball (the circumference of a softball) using only his hands. Juggling the ball, having it strike any part of the body, other than the hands, or dropping the ball, constitutes a failure. The

toss must be from a distance of eight feet and thrown in a soft, underhand manner. The trajectory should be such that it does not rise higher than the subject's head and reaches the receiver at chest level.

Attempts: 3 Scoring: Maximum—3 points

Fig. 2-20 Catch

Test Item No. 2: *Ball bounce and catch*
Factor: Eye and Hand Coordination

The student must drop or push an eight inch diameter utility ball to the ground and catch it on the rebound immediately, no intervening bounces are permitted. Juggling the ball, having it strike any part of the body (other than the hands), or a drop, constitutes a failure.

Attempts: 3 Scoring: Maximum—3 points

Fig. 2-21 Ball Bounce and Catch

Test Item No. 3: *Touch ball swinging laterally*
Factor: Eye and Hand Coordination

With dominant hand on shoulder (palm down, index finger extended and hand motionless), the subject on command "touch" must touch laterally swinging whiffleball (softball circumference) with the index finger on the side of the ball. The instructor holds the whiffleball suspended on an 18" cord at mid-chest level and proceeds to swing the ball laterally. Commands are issued: (1) when the ball is at full arm extension across the midline; (2) when the ball is at the midline; and (3) when the ball is at full arm extension on the dominant side of the midline. An unsuccessful attempt is recorded if the subject delays response, touches the ball with other than the index finger, misses, or moves his head.

Attempts: 3 Scoring: Maximum—3 points

Fig. 2-22 Touch Ball Swinging Laterally

Test Item No. 4: *Touch ball swinging fore and aft*
Factor: Eye and Hand Coordination

With dominant hand on hip (palm up, index finger extended and head motionless), the subject on command "touch" must touch fore and aft swinging whiffleball (softball circumference) with index finger on the under surface of the ball. The instructor holds the whiffleball

Fig. 2-23 Touch Ball Swinging Fore and Aft

suspended on an 18" cord at midchest level and issues commands: (1) when the ball is at full arm extension; (2) when the ball is at midpoint; and (3) when the ball is closest to the subject. An unsuccessful attempt is recorded if the subject delays response, touches the ball with other than the index finger, misses, or moves his head.

Attempts: 3 Scoring: Maximum—3 points

Test Item No. 5: *Bat ball with hand*
Factor: Eye and Hand Coordination

Same procedure as test item number 4 except the subject bats the ball with an open hand held in readiness between the waist and shoulder. An unsuccessful attempt is recorded if some part of the hand does not touch some part of the ball.

Attempts: 3 Scoring: Maximum—3 points

Fig. 2-24 Bat Ball with Hand

Test Item No. 6: *Bat ball with bat*
Factor: Eye and Hand Coordination

Same procedure as test item number 4 except the subject bats the ball with a plastic whiffleball bat which is held in readiness between the waist and the shoulder. An unsuccessful attempt is recorded if some part of the bat does not touch some part of the ball.

Attempts: 3 Scoring: Maximum—3 points

Fig. 2-25 Bat Ball with Bat

Maximum total points—Eye and Hand Coordination—18 points

EYE AND HAND ACCURACY

Test Item No. 1: *Throw—right hand*
Factor: Eye and Hand Accuracy

The subject throws a whiffleball (softball circumference) at a modified version of the Johnson Target Test.[1] (See illustration below). The subject may use either an overhand or underhand throwing motion; minimum throwing distance—ten feet. The ball must hit the target without previously touching the floor for a correct attempt. Scoring: 3 points, inner rectangle and line; 2 points, middle rectangle and line; 1 point, outer rectangle and line.

Attempts: 3 Scoring: Maximum—9 points

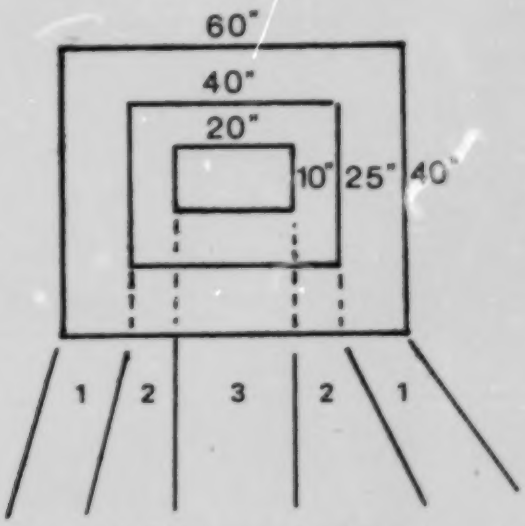


Fig. 2-26 Johnson Target Test

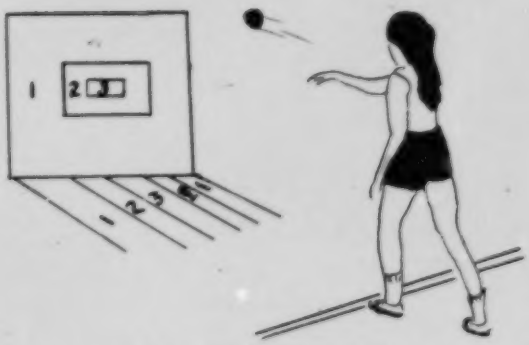


Fig. 2-27 Throw — Right Hand

Test Item No. 2: *Throw—left hand*
Factor: Eye and Hand Accuracy

Same procedure as test item number 1 except that

[1] L. William Johnson, "Objective Test in Basketball for High School Boys."

subject throws with the left hand.

Attempts: 3 Scoring: Maximum–9 points

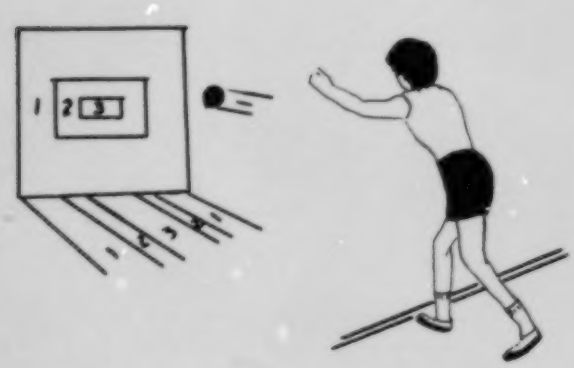


Fig. 2-28 Throw – Left Hand

Maximum total points–Eye and Hand Accuracy–18 points

EYE AND FOOT ACCURACY

Test Item No. 1: *Kick–right foot*
Factor: Eye and Foot Accuracy

Same procedure as test item number 1 above except the subject kicks stationary volleyball at the target with his right foot and the ball may touch the floor prior to contacting the target.

Attempts: 3 Scoring: Maximum–9 points

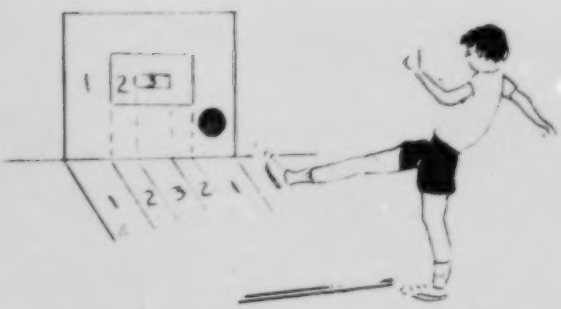


Fig. 2-29 Kick – Right Foot

Test Item No. 2: *Kick–left foot*
Factor: Eye and Foot Accuracy

Same procedure as test item number 1 except the subject kicks stationary volleyball with his left foot.

Attempts: 3 Scoring: Maximum–9 points

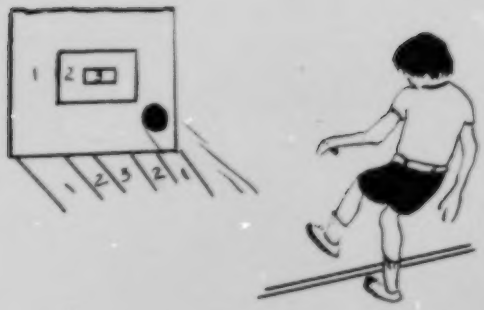


Fig. 2-30 Kick – Left Foot

Subject's composite score on eye and foot accuracy is the total number of points scored in six attempts.

Maximum total points–Eye and Foot Accuracy–18 points

Maximum Grand Total–88 points

Test scoring. The Motor Ability Test Form presents items clustered in terms of the following factors: gross body coordination; balance and postural orientation; eye-hand coordination; eye-hand accuracy; and eye-foot accuracy. The student's raw scores in each area (for the number of attempts indicated), plus the anecdotal remarks describing how the tasks are performed, should be recorded. Each trial in gross body coordination, balance and postural orientation, and eye-hand coordination is recorded on the score sheet in the trial column with a plus (+) to indicate success and a zero (0) to indicate failure. The total number of pluses will be the raw score. In the areas of eye-hand accuracy and eye-foot accuracy, the target scores for each trial (or a zero if the target is missed completely) are each entered as a trial score (example 2-0-1). A total for the accuracy task is then recorded in the raw score column. Sub-totals for each component area and a grand total for all raw scores are computed on the score sheet. If a student completes all attempts successfully, he will compile a grand total of 88 points.

The raw scores will later be converted into percentiles and stanine scores for the purpose of computing the Motor Ability Index (MAI). These processes will be described in class.

Table 2-3 provides the Motor Ability Test Form with hypothetical scores so that the reader can review the scoring procedure.

TABLE 2-3

MOTOR ABILITY TEST FORM[1]

NAME Doe (Last) John (First) 6 (Age) 1 (Grade) Northeast (School) M (Sex)

HANDEDNESS: R X L ____ FOOTEDNESS: R X L ____

CLASSROOM TEACHER Mrs. Smith

DATE 9/2/74

WEIGHT 45

HEIGHT 48"

			PRE-TEST				POST-TEST			
TEST ITEM	ATT.	FACTOR MEASURED	TRIALS	RS	%	S	TRIALS	RS	%	S
1 Walk	2	Gross Body Coord.	++	2						
2 Creep	2	Gross Body Coord.	+0	1						
3 Climb stairs	2	Gross Body Coord.	++	2						
4 Skip	2	Gross Body Coord.	+0	1						
5 March-in-place	2	Gross Body Coord.	+0	1						
TOTAL (Maximum–10 Points)			00+	7	20	4				
1 Stand–both feet (15 sec.)	3	Bal-Post. Orient.	0+0	1						
2 Stand–right foot (15 sec.)	3	Bal-Post. Orient.	+00	1						
3 Stand–left foot (15 sec.)	3	Bal-Post. Orient.	00+	1						
4 Jump–one foot leading	3	Bal-Post. Orient.	0++	2						
5 Jump–both feet simultaneously	3	Bal-Post. Orient.	0+0	1						
6 Jump–both feet	3	Bal-Post. Orient.	+00	1						
7 Hop–right foot	3	Bal-Post. Orient.	00+	1						
8 Hop–left foot	3	Bal-Post. Orient.	00+	1						
TOTAL (Maximum–24 Points)				9	10	3				
1 Catch	3	Eye-hand Coord.	0++	2						
2 Ball–bounce and catch	3	Eye-hand Coord.	+0+	2						
3 Touch ball swg. laterally	3	Eye-hand Coord.	+++	3						
4 Touch ball swg. fore/aft	3	Eye-hand Coord.	+++	3						
5 Bat ball with hand	3	Eye-hand Coord.	0++	2						
6 Bat ball with bat	3	Eye-hand Coord.	0+0	1						
TOTAL (Maximum–18 Points)				13	50	5				
1 Throw–right hand	3	Eye-hand Accuracy	033	6						
2 Throw–left hand	3	Eye-hand Accuracy	111	3						
TOTAL–Maximum–18 Points)				9	80	7				
1 Kick–right foot	3	Eye-foot Accuracy	021	3						
2 Kick–left foot	3	Eye-foot Accuracy	200	2						
TOTAL (Maximum–18 Points)				5	50	5				
GRAND TOTAL (Stanine Points)						24				

ANECDOTAL REMARKS: Difficulty with bilateral movements. Balancing problem may be attributable to inability to align parts in accordance with principles of center of gravity. Fearful of height. Eye-foot accuracy needs work.

Symbols

RS = raw score

% = percentile score

S = Stanine score

\+ = passed

0 = failed

[1] D.R. Hilsendager, H.K. Jack and Lester Mann. *Basic Motor Fitness Test for Emotionally Disturbed and Mentally Handicapped Children.* Permission to publish granted.

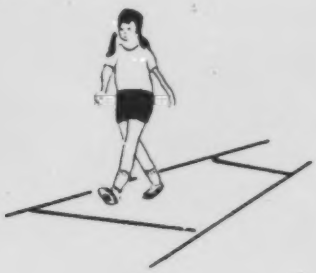
Motor Ability, Criterion-referenced

The instrument is appropriate for students who have difficulty comprehending the test directions provided in the previous motor ability instrument.

BASIC MOTOR ABILITY SCREENING TEST[1,2]

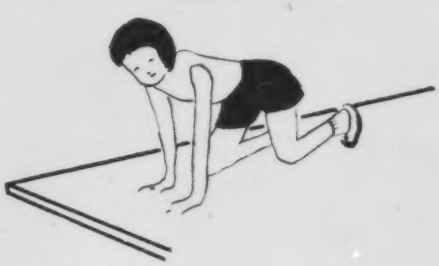
GROSS BODY COORDINATION

Test Item No. 1: *Walk*
Factor: Gross Body Coordination
0 – Makes no attempt to walk
1 – Walks with assistance
2 – Walks with an irregular bilateral pattern
3 – Walks with proper bilateral pattern for less than 15 feet
4 – Walks with proper bilateral pattern for 15 or more feet
Correct bilateral pattern: left arm-right foot and right arm-left foot.



Walk

Test Item No. 2: *Creep*
Factor: Gross Body Coordination
0 – Makes no attempt to creep
1 – Will creep when physically assisted
2 – Creeps with an irregular bilateral pattern
3 – Creeps alternating hands and knees for less than 10 feet
4 – Creeps properly for 10 or more feet



Creep

[1] Ibid.
[2] Format patterned after the Basic Movement Performance Profile designed by H.F. Fait, *Special Physical Education: Adapted, Corrective, Developmental,* pp. 208-210.

Test Item No. 3: *Climb-stairs*
Factor: Gross Body Coordination
0 – Makes no attempt to walk up stairs
1 – Walks up one step and down with assistance
2 – Walks up and down 4 steps with assistance
3 – Walks up and down 4 steps; two feet on each step
4 – Walks up and down 4 steps; alternating one foot on each step

Climb Stairs

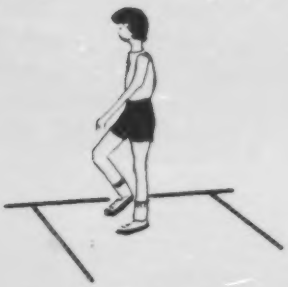
Test Item No. 4: *Skip*
Factor: Gross Body Coordination
0 – Makes no attempt to skip
1 – Steps from left to right foot or right to left foot
2 – Hops on left or right foot
3 – Combines stepping and hopping in an irregular pattern
4 – Skips at least 10 feet in a smooth manner

Skip

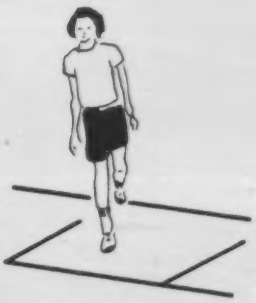
Test Item No. 5: *March-in-Place*
Factor: Gross Body Coordination
0 – Makes no attempt to march-in-place
1 – Marches-in-place if physically assisted
2 – Marches in an irregular pattern
3 – Marches in a rhythmical pattern; 15 steps in 15 seconds
4 – Marches in a rhythmical pattern; 30 steps in 15 seconds

Note: The tester sets the cadence by clapping 1 clap per second (15 seconds) and 2 claps per second (15 seconds)

Maximum Total Points – Gross Body Coordination – 20 points



March In-Place



Stand—Right Foot

BALANCE AND POSTURAL ORIENTATION

Test Item No. 1: *Stand-both feet*
Factor: Balance-Postural Orientation

0 – Makes no attempt to assume the standing position
1 – Assumes the standing position, but will not extend the arms forward from the shoulders at a 90 degree and/or keep his eyes closed
2 – Assumes the correct standing position (arms extended and eyes closed) when assisted
3 – Assumes the correct standing position, but shifts his feet or moves his arms 15 degrees from the 90 degree position prior to the elapse of 15 seconds
4 – Assumes the correct standing position for 15 seconds

Stand—Both Feet

Test Item No. 2: *Stand-right foot*
Factor: Balance-Postural Orientation

0 – Makes no attempt to assume the standing position on right foot
1 – Assumes the standing position incorrectly, i.e., does not raise the left foot
2 – Assumes the correct standing position (weight on right foot, eyes open) when assisted
3 – Assumes the correct standing position, but shifts right foot or touches left foot to right leg, foot, floor or any other supporting structure prior to the elapse of 15 seconds
4 – Assumes the correct standing position for 15 seconds

Test Item No. 3: *Stand-left foot*
Factor: Balance-Postural Orientation

0 – Makes no attempt to assume standing position on left foot
1 – Assumes the standing position incorrectly, i.e., does not raise the right foot
2 – Assumes the correct standing position (weight on left foot, eyes open) when assisted
3 – Assumes the correct standing position, but shifts left foot or touches right foot to left leg, foot, floor or any other supporting structure before time lapse of 15 seconds
4 – Assumes the correct standing position for 15 seconds

Stand—Left Foot

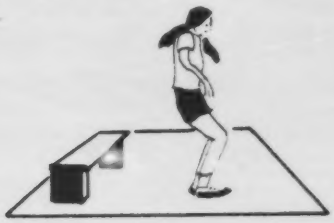
Test Item No. 4: *Jump-land feet staggered*
Factor: Balance-Postural Orientation

0 – Makes no attempt to jump off 18" high step or bench
1 – Steps down from step or bench with assistance
2 – Jumps with two-foot take-off and lands with assistance
3 – Jumps with two-foot take-off, but lands incorrectly, i.e., does not land with feet staggered or loses balance
4 – Jumps with two-foot take-off and lands correctly

Jump—One Foot Leading

Test Item No. 5: *Jump-land feet parallel*
Factor: Balance-Postural Orientation

0 – Makes no attempt to jump off 18" high step or bench
1 – Steps down from step or bench with assistance
2 – Jumps with two-foot take-off and lands with assistance
3 – Jumps with two-foot take-off, but lands incorrectly, i.e., does not land with feet parallel or loses balance
4 – Jumps with two-foot take-off and lands correctly



Jump—Both Feet Simultaneously

Test Item No. 6: *Stationary jump-both feet*
Factor: Balance-Postural Orientation

0 – Makes no attempt to jump
1 – Jumps and lands with assistance
2 – Hops and lands with one-foot take-off
3 – Jumps with two-foot take-off, lands without stopping, loses balance, uses a support, or steps on, or out of an 18" square
4 – Performs the jumping task correctly

Stationary Jump—Both Feet

Test Item No. 7: *Stationary hop-left foot*
Factor: Balance-Postural Orientation

0 – Makes no attempt to hop
1 – Hops with assistance
2 – Hops irregularly, i.e., intermixes hops, jumps and leaps
3 – Hops on left foot incorrectly, i.e., does not hop 3 times without stopping, loses balance, uses a support, or steps on, or out of an 18" square
4 – Performs the hopping task correctly

Stationary Hop—Left Foot

Test Item No. 8: *Stationary hop-right foot*
Factor: Balance-Postural Orientation

0 – Makes no attempt to hop
1 – Hops with assistance
2 – Hops irregularly, i.e., intermixes hops, jumps and leaps
3 – Hops on right foot incorrectly, i.e., does not hop 3 times without stopping, loses balance, uses a support, or steps on, or out of an 18" square
4 – Performs the hopping task correctly

Maximum Total Points – Balance-Postural Orientation – 32 points

Stationary Hop—Right Foot

EYE-HAND COORDINATION

Test Item No. 1: *Catch*
Factor: Eye-Hand Coordination

0 – Makes no attempt to catch a whiffleball (softball circumference)
1 – Keeps eyes on the ball momentarily, but does not make contact with hands
2 – Keeps eyes on the ball, contacts it with hands, but does not catch the ball
3 – Catches the ball incorrectly, i.e., juggles the ball, or supports the ball with any other part of the body other than the hands
4 – Performs the task correctly (3 correct catches)

Note: The toss must be from a distance of 8 feet and thrown in a soft underhand manner. The trajectory should be such that it does not rise higher than the subject's head and reaches the receiver at chest level.

Catch

Test Item No. 2: *Ball bounce and catch*
Factor: Eye-Hand Coordination

0 – Makes no attempt to bounce and catch a playground ball (8" diameter)
1 – Bounces the ball, but does not make contact with hands
2 – Bounces ball, keeps eyes on ball, makes contact with hands, but does not catch it
3 – Bounces the ball, but catches it incorrectly, i.e., juggles the ball or supports the ball with another part of the body other than the hands
4 – Bounces and catches the ball with the hands (3 times)

Ball Bounce and Catch

Test Item No. 3: *Touch ball swinging laterally*
Factor: Eye-Hand Coordination

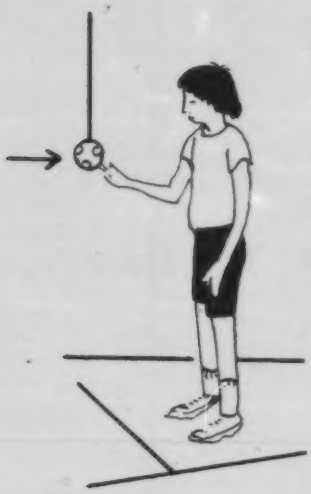
0 – Makes no attempt to touch a stationary or swinging whiffleball (softball circumference)
1 – Touches a stationary ball with hand
2 – Touches a swinging ball with hand
3 – Touches a stationary ball with index finger 3 times; ball suspended left of mid-line, mid-line, and right of mid-line (head permitted to rotate)
4 – Touches a moving ball with index finger 3 times; ball to be touched on command left of mid-line, mid-line, and right of mid-line (head to remain motionless)

Note: The instructor holds the whiffleball suspended on an 18" cord at mid-chest level.

Touch Ball Swinging Laterally

Test Item No. 4: *Touch ball swinging fore and aft*
Factor: Eye-Hand Coordination

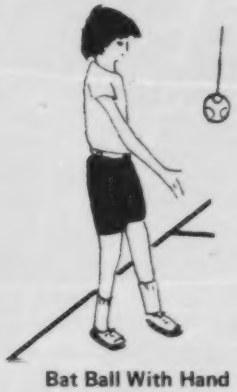
0 – Makes no attempt to touch a stationary or swinging whiffleball (softball circumference)
1 – Touches a stationary ball with hand
2 – Touches a ball swinging fore and aft with hand
3 – Touches stationary ball with index finger 3 times (ball suspended at mid-line – 24", 18", and 12" from the student)
4 – Touches moving ball with index finger 3 times; ball to be touched on command at distance of 24", 18", and 12" from the student



Touch Ball Swinging Fore and Aft

Test Item No. 5: *Bat ball with hand*
Factor: Eye-Hand Coordinations,

0 – Makes no attempt to bat a stationary or swinging whiffleball with hand
1 – Swings at a stationary ball, but does not strike the ball cleanly (i.e., hits the string)
2 – Swings at a moving ball, but does not strike the ball cleanly
3 – Bats a stationary ball with the hand correctly (3 times)
4 – Bats a moving ball (fore and aft) with the hand correctly (3 times)



Bat Ball With Hand

Test Item No. 6: *Bat ball with bat*
Factor: Eye-Hand Coordination

0 – Makes no attempt to strike a stationary or moving whiffleball with a plastic bat
1 – Swings bat at a stationary whiffleball, but does not strike the ball cleanly (i.e., hits the string)
2 – Swings bat at moving whiffleball, but does not strike the ball cleanly
3 – Strikes a stationary ball with bat correctly 3 times

Bat Ball With Bat

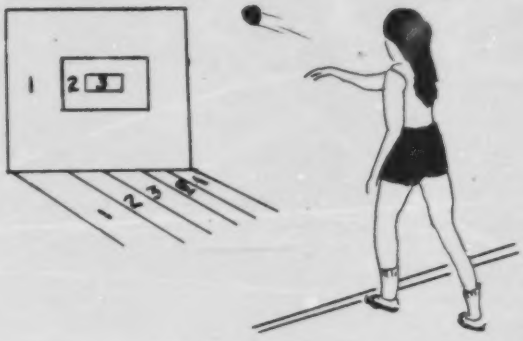
4 – Strikes a moving ball (fore and aft) with bat correctly (3 times)

Maximum Total Points – Eye-Hand Coordination – 24 points

EYE-HAND ACCURACY

Test Item No. 1: *Throw-right hand* (Refer to page 21 for target dimensions)
Factor: Eye-Hand Accuracy

0 – Makes no attempt to throw whiffleball with right hand
1 – Grasps ball with right hand and releases in an attempt to throw
2 – Throws or tosses the ball at a target 10 feet away, striking on or within the overall boundaries 1 of 3 attempts. The ball must hit the target without previously touching the floor for a correct attempt.

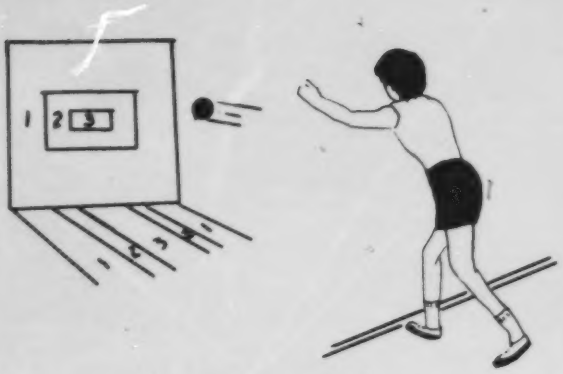


Throw–Right Hand

3 – Two successful attempts in 3 tries
4 – Three successful attempts in 3 tries

Test Item No. 2: *Throw-left hand*
Factor: Eye-Hand Accuracy

0 – Makes no attempt to throw whiffleball with left hand
1 – Grasps ball with left hand and releases in an attempt to throw



Throw—Left Hand

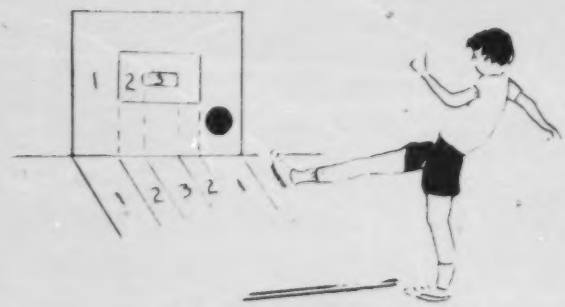
2 – Throws or tosses the ball at target 10 feet away, striking on or within the overall boundaries 1 of 3 attempts. The ball must hit the target without previously touching the floor for a correct attempt
3 – Two successful attempts in 3 tries
4 – Three successful attempts in 3 tries

Maximum Total Points – Eye-Hand Accuracy – 8 points

EYE-FOOT ACCURACY

Test Item No. 1: *Kick-right foot*
Factor: Eye-Foot Accuracy

0 – Makes no attempt to kick stationary volleyball with right foot
1 – Kicks ball at target, but does not strike it
2 – Kicks ball at target 10 feet away, striking on or within the overall boundaries 1 of 3 attempts. The ball may touch the floor prior to contacting the target
3 – Two successful attempts in 3 tries [1]
4 – Three successful attempts in 3 tries

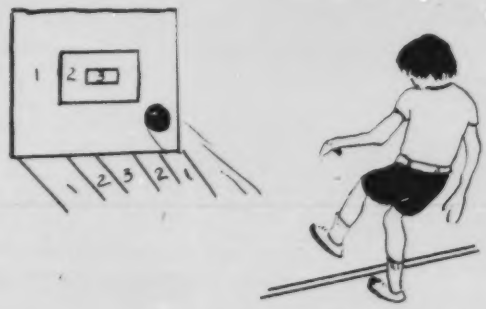


Kick—Right Foot

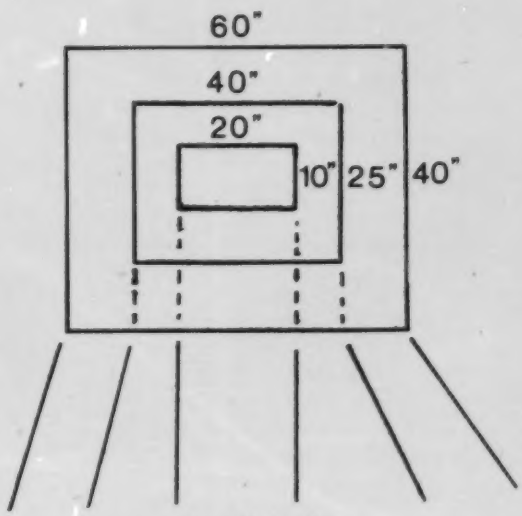
Test Item No. 2: *Kick-left foot*
Factor: Eye-Foot Accuracy

0 – Makes no attempt to kick stationary volleyball with left foot
1 – Kicks ball at target, but does not strike it
2 – Kicks ball at target 10 feet away, striking on or within the overall boundaries 1 of 3 attempts. The ball may touch the floor prior to contacting the target
3 – Two successful attempts in 3 tries
4 – Three successful attempts in 3 tries

Maximum Total Points – Eye-Foot Accuracy – 8 points



Kick—Left Foot



Johnson Target Test

Test scoring. [2] Table 2-4 provides the form for scoring pupil performance. Use the form in conjunction with the test directions. For example, if a student makes no attempt to walk (Test Item No. 1) when requested, record a score of "0" in the appropriate raw score column. (Scores for each test item can range from "0-4.") When the entire test has been administered, determine the raw scores for each factor and the total performance score.

[1] A successful attempt is recorded if the ball strikes within the confines of the target.

[2] When sufficient data is gathered, percentile scores for each test item, stanine scores for each test item, and percentile scores of the motor ability index distribution will be determined.

TABLE 2-4

MOTOR ABILITY TEST FORM[1]

NAME _____ ____ ____ _____ ____
Last First Age Grade School Sex

HANDEDNESS: R ___ L ___ FOOTEDNESS: R ___ L ___

CLASSROOM TEACHER _____ DATE _____

		PRE–TEST				POST–TEST			
TEST ITEM	FACTOR MEASURED	TRIALS	RS	%	S	TRIALS	RS	%	S
1 Walk	Gross Body Coord.								
2 Creep	Gross Body Coord.								
3 Climb stairs	Gross Body Coord.								
4 Skip	Gross Body Coord.								
5 March-in-place	Gross Body Coord.								
TOTAL (Maximum – 20 points)									
1 Stand–both feet (15 sec.)	Bal-Post. Orient.								
2 Stand–right foot (15 sec.)	Bal-Post. Orient.								
3 Stand–left foot (15 sec.)	Bal-Post. Orient.								
4 Jump–one foot leading	Bal-Post. Orient.								
5 Jump–both feet simultaneously	Bal-Post. Orient.								
6 Jump–both feet	Bal-Post. Orient.								
7 Hop–right foot	Bal-Post. Orient.								
8 Hop–left foot	Bal-Post. Orient.								
TOTAL (Maximum – 32 points)									
1 Catch	Eye-hand Coord.								
2 Ball–bounce and catch	Eye-hand Coord.								
3 Touch ball swg. laterally	Eye-hand Coord.								
4 Touch ball swg. fore/aft	Eye-hand Coord.								
5 Bat ball with hand	Eye-hand Coord.								
6 Bat ball with bat	Eye-hand Coord.								
TOTAL (Maximum – 24 points)									
1 Throw-right hand	Eye-hand Accuracy								
2 Throw-left hand	Eye-hand Accuracy								
3 Kick-right foot	Eye-foot Accuracy								
4 Kick-left foot	Eye-foot Accuracy								
TOTAL (Maximum – 16 points)									
GRAND TOTAL (Stanine Points)									
MOTOR ABILITY INDEX									

ANECDOTAL REMARKS

_____

_____

_____

Symbols
% – Percentile score
S – Stanine score

[1] D.R. Hilsendager, H.K. Jack and Lester Mann. *Basic Motor Fitness Test for Emotionally Disturbed and Mentally Handicapped Children.*

Posture Screening

Appraise the posture of all students.

Recommended screening procedures for identifying students with potential body mechanics problems involves the following series of steps (refer to Appendix D for Posture Screening Grid Construction Directions):

1. Reproduce New York Posture Rating Charts. (Refer to Figure 2-32.) Note: Permission was granted by the New York State Department of Education to reproduce forms as they are no longer available commercially.[1]
2. Use constructed posture grid or Symmetrigraf[2] to screen students. Also have available a tray with a foam-rubber insert filled with a foot disinfectant solution; a chair; a stadiometer; and a reasonably bulky object.
3. Students to be tested (maximum of five at a time) should line up alphabetically; as one finishes, he returns to class and sends in the next student. While they wait, boys remove gym shoes, stockings, and shirts and don shorts, and girls remove shoes and stockings, and don bathing suits. Another procedure for evaluating postural and body alignment is given in Appendix E.
4. The testing sequence involves: height and weight check by an assistant; posture screening to detect static posture (use foot bath solution to provide imprint for detecting flat feet and as a disinfectant); walking to a chair, sitting, rising, and lifting and placing an object on the floor as a means of assessing dynamic posture.

Test directions, modified Iowa Posture Test. Subjectively, observe each pupil as he walks to and from the grid, sits, rises from the chair, and lifts and places an object on the floor. It is important that the teacher repeatedly request that each child relax throughout the screening; rationale: rigid unnatural body mechanics will decrease the validity of the screening.

Scoring procedure, modified Iowa Posture Test. The primary purpose for including aspects of the Iowa Posture Test is to provide a means of assessing the student's dynamic posture. The teacher should be aware of, and record, anecdotal remarks for the following atypical patterns:

- Improper alignment of body parts (while walking)
- Slouched sitting posture (i.e., exaggerated back curve, head and shoulders forward)
- Lifting an object by bending the back rather than the knees and hips and supporting the object away from the center of gravity
- Setting an object down (use the same criteria as for lifting an object)

Test directions, modified New York Posture Rating Chart.[3] Equipment needed.

1. Heavy, clearly visible plumb line.
2. Convenient stationary support for plumb line.
3. Masking tape (approximately 1" wide).
4. Backdrop or screen
5. Grease pen

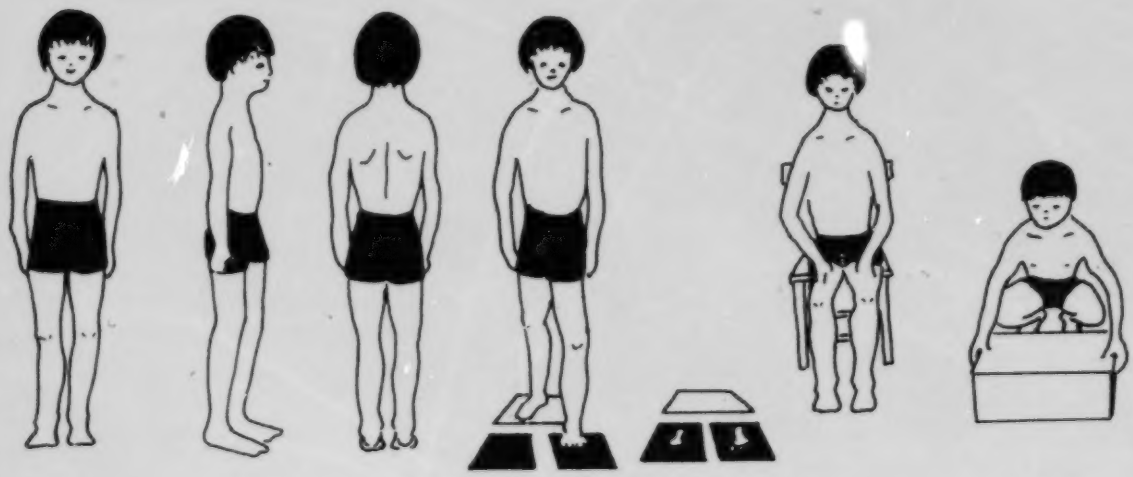


Fig. 2-31 Posture Screening Sequence

[1] Division of Physical Education and Recreation, New York State Education Department, "Posture Rating Chart" *New York State Physical Fitness Test.*

[2] "Symmetrigraf," Reedco, Inc.

[3] Division of Physical Education and Recreation, *op.cit.*, p. 14.

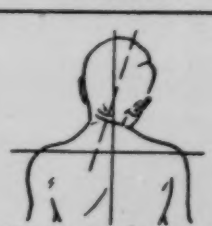
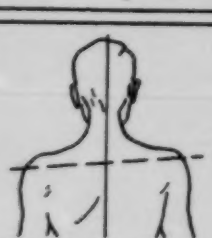
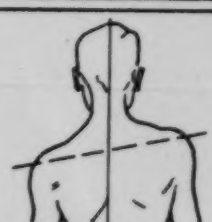
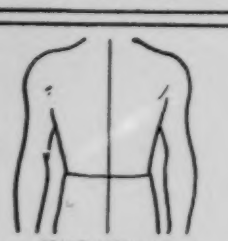
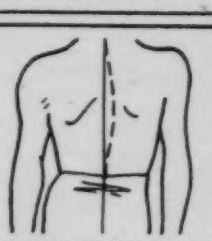
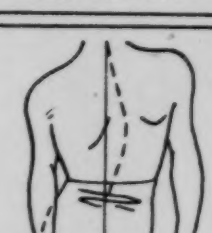
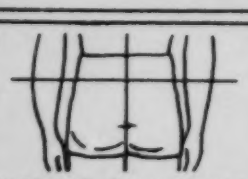
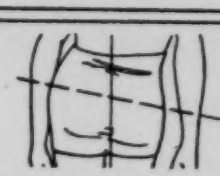
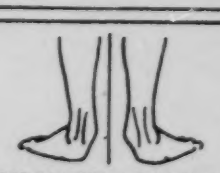
POSTURE RATING CHART

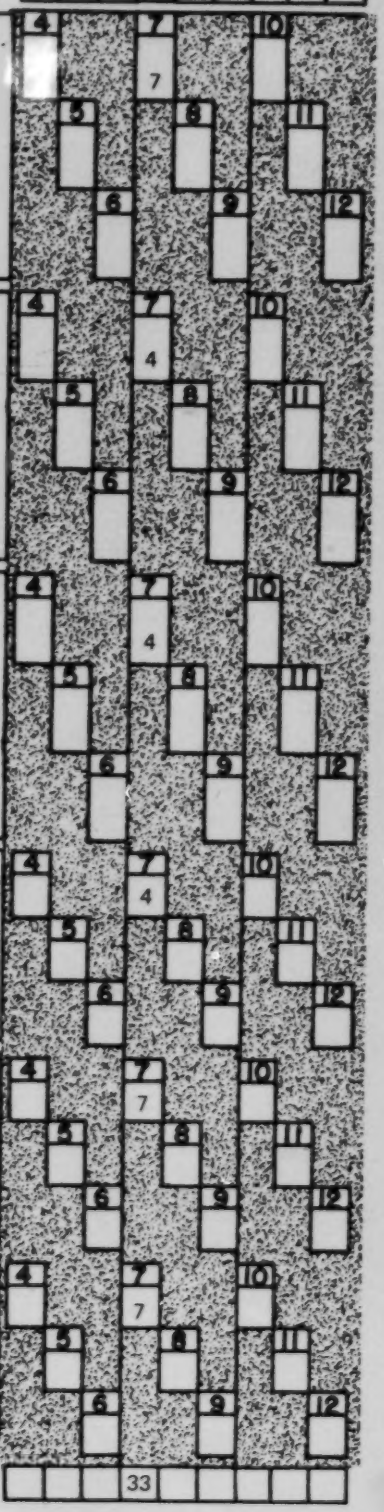
NAME Doe (Last) John (First) AGE 12 SEX M

Grade 4 5 6 7 8 9 10 11 12

Rater's Initials TV

Date of Test 9/74

7 HEAD ERECT GRAVITY LINE PASSES DIRECTLY THROUGH CENTER	4 HEAD TWISTED OR TURNED TO ONE SIDE SLIGHTLY	1  HEAD TWISTED OR TURNED TO ONE SIDE MARKEDLY
7 SHOULDERS LEVEL (HORIZONTALLY)	4  ONE SHOULDER SLIGHTLY HIGHER THAN OTHER	1  ONE SHOULDER MARKEDLY HIGHER THAN OTHER
7  SPINE STRAIGHT	4  SPINE SLIGHTLY CURVED LATERALLY	1  SPINE MARKEDLY CURVED LATERALLY
7  HIPS LEVEL (HORIZONTALLY)	4 ONE HIP SLIGHTLY HIGHER	1  ONE HIP MARKEDLY HIGHER
7 FEET POINTED STRAIGHT AHEAD	4 FEET POINTED OUT	1  FEET POINTED OUT MARKEDLY ANKLES SAG IN(PRONATION)
7 ARCHES HIGH	4 ARCHES LOWER, FEET SLIGHTLY FLAT	1 ARCHES LOW, FEET MARKEDLY FLAT



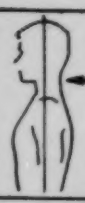
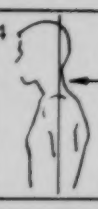
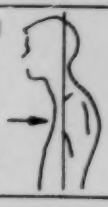
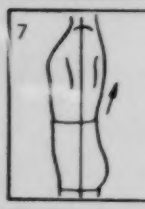
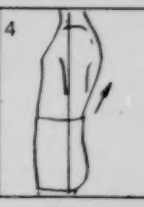
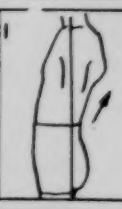
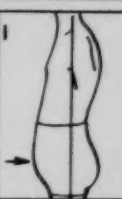
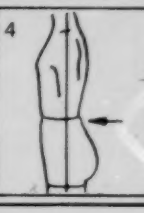
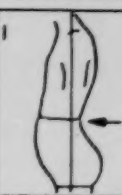
Total Page One 33

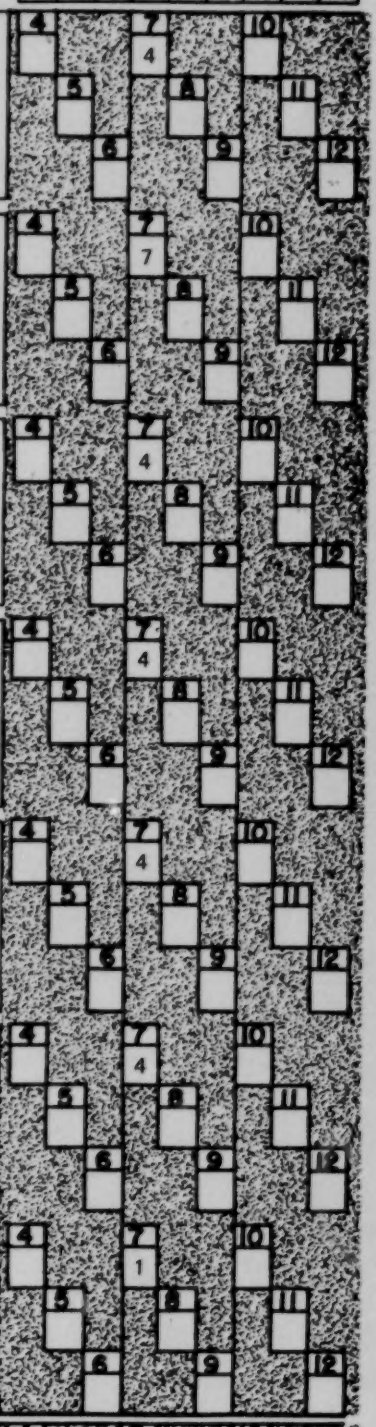
Fig. 2-32

(Courtesy of the New York State Education Department. Screening has been modified to 7-4-1.)

Fig. 2-32 (Continued)

Grade	4	5	6	7	8	9	10	11	12
Total Page One				33					

7	 NECK ERECT, CHIN IN, HEAD IN BALANCE DIRECTLY ABOVE SHOULDERS	4	 NECK SLIGHTLY FORWARD, CHIN SLIGHTLY OUT	1	NECK MARKEDLY FORWARD, CHIN MARKEDLY OUT
7	CHEST ELEVATED BREASTBONE FURTHEST FORWARD PART OF BODY	4	CHEST SLIGHTLY DEPRESSED	1	 CHEST MARKEDLY DEPRESSED (FLAT)
7	SHOULDERS CENTERED	4	SHOULDERS SLIGHTLY FORWARD	1	SHOULDERS MARKEDLY FORWARD (SHOULDER BLADES PROTRUDING IN REAR)
7	UPPER BACK NORMALLY ROUNDED	4	UPPER BACK SLIGHTLY MORE ROUNDED	1	UPPER BACK MARKEDLY ROUNDED
7	 TRUNK ERECT	4	 TRUNK INCLINED TO REAR SLIGHTLY	1	 TRUNK INCLINED TO REAR MARKEDLY
7	ABDOMEN FLAT	4	ABDOMEN PROTRUDING	1	 ABDOMEN PROTRUDING AND SAGGING
7	LOWER BACK NORMALLY CURVED	4	 LOWER BACK SLIGHTLY HOLLOW	1	 LOWER BACK MARKEDLY HOLLOW



TO OBTAIN TOTAL RAW SCORE:

1. Determine the score for each of the above 13 items as follows:
   - 7 points if description in left hand column applies
   - 4 points if description in middle column applies
   - 1 point if description in right hand column applies
2. Enter score for each item under proper grade in the scoring column
3. Add all 13 scores, plus a constant of 9 and place total in appropriate space.

	4	5	6	7	8	9	10	11	12
TOTAL RAW SCORE				61					
Constant				9					
Total				70					25

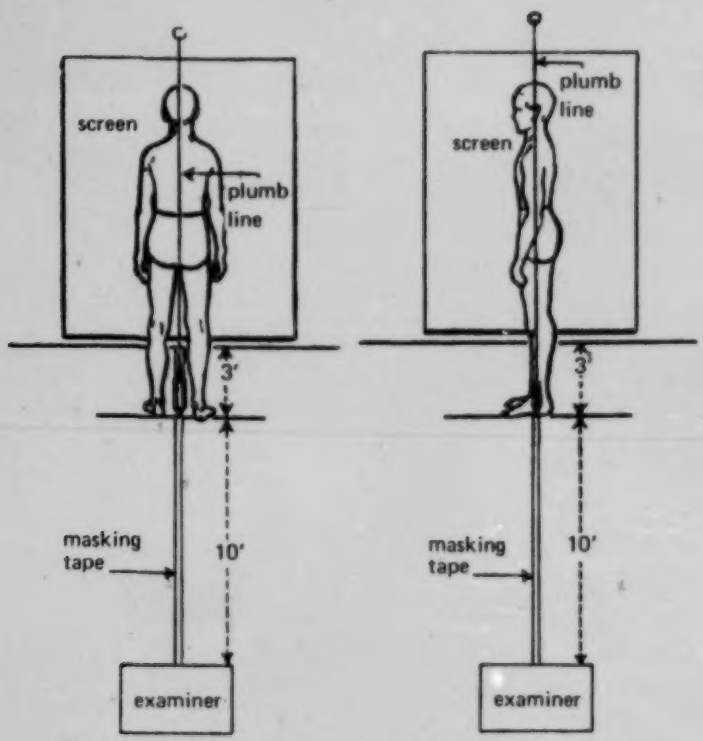


Fig. 2-33 N.Y. Posture Screening Procedure[1]

Procedure:

1. Suspend a plumb line from a stationary support in front of an appropriate screen so that the bob touches the floor. Directly under the bob, construct a straight line using the masking tape. This line should begin at a point on the floor three feet from the bob toward the screen, pass directly under the bob and extend ten feet on the examiner side of the bob. (Refer to Figures 2-32 and 2-33.)
2. The pupil assumes a comfortable and natural standing position between the plumb line and the screen, straddling the short end of the floor line with his back to the plumb line.
3. The examiner takes a position on the floor line about ten feet from the pupil with the plumb line between himself and the pupil.
4. After the pupil's lateral posture and feet have been rated, the pupil then makes a one-quarter left turn so that his left side is next to the plumb line and stands with his feet at right angles to the floor line.
5. Examiner scores each segment as shown on the Posture Rating Chart.
   a. First, observe the pupil; then review the illustrations and descriptions on the Posture Rating Chart.
   b. Evaluate the pupil and record his score in the box under the appropriate grade column.
      (1) Pupil's score on each segment should be 7, 4, or 1. The sum of the thirteen scores should then have the constant of 9 added to it.
      (2) Each segment should be scored separately and the scoring of the previous segments should not be allowed to influence the score of the segment under consideration at the moment.

Scoring procedure, modified New York Posture Rating Chart. The student's total score is a composite of the 13-item New York Posture Rating Test, plus anecdotal comments regarding the dynamic movements. Note: Although the New York Screening Test is scored on a 5-3-1 basis, the recommended procedure is to score on a basis of 7-4-1. A perfect score on the New York Test is 65; a maximum score under the proposed procedure would be 91 (the addition of 9 points to all raw scores gives a potential maximum score of 100). This adjustment tends to make the scores more meaningful to the students since they like to view scores in terms of the arbitrary 100 standard.

[1] Permission to publish granted.

Kinesthetic Target-Throwing Test

Test directions. Administer the target-throwing test to all visually handicapped students.

Test Item: *Kinesthetic Target-Throwing Test*
Factor: Kinesthesis

Prior to testing, the subject is required to "pace" the distance to the target and to "feel" the target dimensions with his hands and arms. During the tactile process, the instructor explains the "points" for each rectangle. The subject is then allowed three practice throws with his dominant hand. After each throw, the instructor comments upon the accuracy (e.g., "low and to the left," "high and to the right," etc.) Finally, the subject throws the whiffleball (softball circumference) at the target ten times (without verbal comment). The subject may use either an overhand or underhand throwing motion from a distance of ten feet. The ball must strike the target without previously touching the floor for a correct attempt. Scoring: 3 points, inner rectangle and line; 2 points, middle rectangle and line; and 1 point, outer rectangle and line.

Attempts: 10 Scoring: Total Points for ten attempts

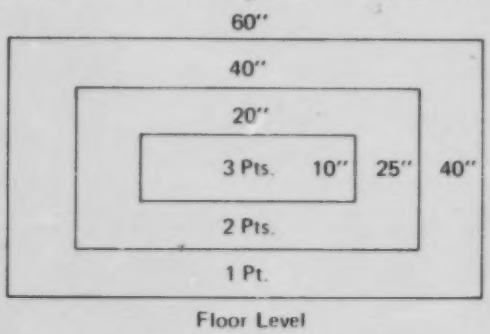


Fig. 2-34 Target-Throwing Test

Self-concept

Administer the instrument that is appropriate for the age level and modify in accordance with the child's dysfunction. For example, a blind student in grades 9-12 would be administered the Wear Attitude Inventory. A "buddy" could be selected to read the statements and record the verbal responses given.

Test directions, pictorial self-concept scale.[1] Boys and girls, my name is . Today we are going to do something that is NOT a school test but is like a game. (Have teacher help in passing out cards, colored sheets, and small blue piece of paper) Make sure teacher sees there are BOY cards and GIRL cards.[2])

Does everyone have a blue sheet of paper, a pink sheet and a yellow sheet? Does everyone have a pack of pictures?

Put your colored paper on the desk with the blue on the left. (Show them by holding up paper, or drawing them on blackboard, or taping the sheet to the blackboard – big blue at the left as you face the blackboard.)

Now this is where the game begins. You each have a pack of pictures. In each picture there is a boy or girl with a star on his shirt or dress. Do you see the child with the star on his shirt or dress on your first picture? So you are looking for the child that has the star on his shirt or dress. Sometimes there will be pictures with more than one child. Which child will you be looking for? (A child with a star, etc.) If you think that the boy or girl with the star is like you, put the picture on the blue sheet of paper. (Point to sheets on board). The blue sheet of paper is for pictures that are like you. If you think that the boy or girl with the star is sometimes like you, put the picture on the pink sheet of paper. The pink sheet of paper is for pictures that are sometimes like you. If you think that the boy or girl with the star is not at all like you, put the picture on the yellow sheet of paper. The yellow sheet of paper is for pictures that are not at all like you.

If the picture of the child with the star is like you, where will you put the picture? (On blue.) If the picture of the child with the star is sometimes like you, where will you put the picture? (Pink.) If the picture of the child with the star is not at all like you, where will you put the picture? (Yellow.)

Do you understand what you are going to do? When you have a question raise your hand and I'll help you. Remember you are the one to choose where your pictures will go. When you are through, leave the pictures on the sheets of paper, raise your hand, and I will come to see you when I can. I might be busy so please leave the cards in the piles and wait. Walk around, check layout.

To: Schools and Agencies Implementing Project ACTIVE
From: Dr. Thomas M. Vodola
Re: Administration of Self-Concept Scale

Suggestions based on previous testing experiences

1. Administer only the "B" Form for pre-and post-tests until we check the "A" Form out again. The "A" Form did not correlate highly with the total test (50 cards) therefore it may not be valid.[1]
2. Whether testing one student, or a group, have all students complete one card before moving on to the next card.
3. Explain each card to the individual or group. Note: The directions state that if the child in the picture is like you, place in one pile, etc. Our testing revealed inaccuracies with that approach because the facial

[1] Angelo S. Bolea, Donald W. Felker and Margaret D. Barnes, "A Pictorial Self-Concept Scale for Children in K-4" *Journal of Educational Measurement*. pp. 223-224

[2] Note. A packet of test cards will be provided in class.

[1] The writer divided the 50 cards into two evenly weighted decks; the purpose: to reduce testing time.

expression is the key factor for self-image. For example, "B" card number 6 shows a pupil doing a cartwheel with a smile on his face. A child may select "not like him" because he cannot do a cartwheel when in actuality he should select "like him" if he is a happy child as the facial countenance indicates.

4. If possible, have the classroom teachers administer the test. I believe they will find the experience enjoyable and will be interested in the post-test results. Additional cards, may be purchased from ED Corporation.
5. Test only students who can reason since it is of doubtful use with trainables or any students who cannot comprehend.
6. Record pre- and post-test scores on Evaluative Data Sheets and submit to the Project Director in June.

Test scoring.

1. The scoring of the PSC is facilitated by the method in which the cards are gathered after the subject has sorted them into piles of "Like Me," "Sometimes Like Me" and "Not Like Me." The most advantageous method of collection is to put the child's name on a blue slip of paper. Use three envelopes stapled together (see diagram) and then put all of the cards from the "Like Me" pile in an envelope with the blue slip, the cards on the "Sometime" pile in the middle envelope, and the cards from the "Not Like Me" pile in the other end envelope. This can be done quickly and is almost essential for group testing. These cards then can be retained for preparation for scoring till a later time.

2. Scoring can be done by hand by using the "Pictorial Self-Concept Scale Score Sheet" which contains directions. (See Table 2-5.) This is time-consuming and is not advisable except when only a few are to be scored.
3. ED Corp. has a scoring program and will run data for you for a small charge. (Address: ED Corp., 822 N. Salisbury Street, W. Lafayette, Indiana 47906.)
4. The data must be put on computer data cards to use the scoring program. Each card in the "Like Me" pile gets a score of 1, each card in the "Sometimes" pile gets a score of 2, and each card in "Not Like Me" pile gets a score of 3. The use of IBM mark sense cards or 1230 answer sheets allows you to record the data and then easily produce a computer data deck for scoring. The transferring of scores of data sheets takes approximately 3 minutes per subject tested. Rather than purchasing from ED Corp., the service of producing a computer deck (which is .06 per card) you should check with your measurement and research center to see if they have facilities for producing a data deck for you. The charge for scoring by ED Corp., is then only $5.00 for each group of tests up to 1,000 tests per group

Test directions, a picture choice, grades K-1.[1] This instrument seeks to measure a child's interest in four subject fields (language, listening and speaking; math; science; and aesthetics – art and music), by presenting to the child 28 sets of three hypothetical activities; he is to choose one of the three activities he would most like to do. Each activity is presented both orally by the test administrator, and visually in the form of a picture on the child's response sheet. The picture is included to provide the child with a mnemonic device to aid him in perceiving the choices and in making his response. Each pupil will obtain a profile of four scores, each consisting of the number of activities selected in a particular subject area. If desired, however, only certain subject areas of interest to the user may be scored.

The activities were selected to represent both subject areas of concern as well as activities within the child's realm of experience. It is assumed that relative interest in the various subject areas may be inferred from the activities which the child selects.

It is expected that children will require approximately 20 minutes to complete the instrument. It has been found that children of kindergarten age and above are able to perform this task when the recommended practice activities are used prior to beginning the measure.

The following practice items may be used to insure that the children understand the procedure for responding. These or similar pictures are to be drawn on the blackboard, and different children are asked to mark their responses by placing an X over the appropriate picture.

[1] *Attitude Toward School,* Grades K-12, Revised Edition, pp. 48-61. Permission to publish granted.

1. Which one would *you* rather do?

play with a dog

chop down a tree

pick a flower

2. Which would *you* rather do?

draw a frog

read a story about a frog

find out how
frogs breathe

3. Which one would *you* rather do?

find out how guitars
make sound

play a tune
on the guitar

read how the guitar
was invented

Emphasize that there are no "right" or "wrong" answers, and that different children may be expected to respond differently to the items. Therefore, pupils need not worry if their response is different from that of another child.

Students should receive four response sheets, stapled together in sequential order. (See pages 33-40 for answer sheets and scoring templates.)

Each row of pictures may be identified by the numeral at the left of the row. For pupils who are unable to identify the numerals 1-28, close supervision will be required to insure that pupils are responding at the right place. Administration will be most efficient if conducted with small groups of children rather than with the entire class at once.

Test scoring. Scores may be obtained for all four subject areas or only for those particular areas which are of interest to the user. Subject areas represented by each activity are indicated on the scoring template. Scoring templates may be prepared by cutting out the boxes. Subject areas may be identified by the letters beside each box (L = language, M = mathematics, S = science, A = aesthetics). The template may be placed over the student's response sheets and the responses for all subject areas or only for those areas of interest may be tabulated. Each subject is represented by 21 different activities; therefore, students may receive a maximum of 21 points on any particular subject area.

For each subject area, an average score for a group of pupils may be computed by adding the individual scores and dividing by the number of students in the group.

TABLE 2-5

PICTORIAL SELF-CONCEPT SCALE SCORE SHEET

Item	Card Value	Like Me	Sometimes Like Me	Not Like Me
1	8.1			
2	43.8			
3	30.8			
4	37.9			
5	14.1			
6	18.3			
7	17.1			
8	18.4			
9	14.1			
10	31.1			
11	12.5			
12	40.1			
13	45.4			
14	38.1			
15	35.4			
16	9.9			
17	2.1			
18	44.4			
19	11.5			
20	10.9			
21	22.5			
22	39.4			
23	15.0			
24	45.4			
25	40.1			
26	34.4			
27	38.5			
28	39.8			
29	37.5			
30	39.5			
31	39.6			
32	13.8			
33	15.9			
34	12.3			
35	14.5			
36	18.5			
37	16.9			
38	15.3			
39	15.4			
40	13.9			
41	37.3			
42	13.1			
43	25.0			
44	16.6			
45	37.0			
46	10.3			
47	32.4			
48	6.1			
49	45.1			
50	40.4			
	Total=			
	No.=			
	Average=			

Definitions:
Item – number on pictorial card.

Card Value – as determined by eight judges. Low value-positive. High value-negative.

Like Me; Sometimes Like Me; Not Like Me. Determined by card placement during test.

Totals – determined by adding the card values for cards placed in each column.

No. – number of cards placed in each column.

Average – Total of each column card values divided by number of cards placed in that column.

© Bolea, Barnes, & Felker, 1967

(Permission to publish granted.)

Name _____

Score = ($\bar{X}$ of Not Like Me Col.) minus

($\bar{X}$ of Like Me Col.) + 50

High score = positive self-concept.

A PICTURE CHOICE

Primary Level (Grades K-1)[1]

Directions: (to be read aloud) Look at your paper and you will see that in each row there are three pictures. Each picture is about something you might do in school. I will tell you what is happening in each picture. Then you will put an X over one of the pictures to show which of the three things *you* would *most* like to do.

1. Find your name	Paint a picture	Count the children in class
2. Sing a song	Tell a story	Tell time
3. Color a book	Change hard things into soft things & soft things into hard things	Listen to a story
4. Speak to someone through a can	Color tin cans	Fit little cans into big cans
5. Cut out pictures of cows	Listen to a story about cows	Find out what cows have to do with butter, cheese and milk
6. Count the sticks in a box	Listen to a story about the sticks	Find out what the sticks are made of
7. Draw a fish	Watch how a fish moves	Listen to a story about a fish
8. Find out which trees have smooth bark and which have rough bark	Count the trees on the block with smooth bark	Draw a picture of a tree with smooth bark and a tree with rough bark
9. Make something from clay	Find out where clay comes from	Give each child the same amount of clay
10. Count the beans in the bowl	Grow a bean plant	Make a picture using beans
11. Listen to a story about a teapot	Make a teapot	Find out how a teapot makes steam
12. Draw pictures of different kinds of transportation	Tell about different kinds of transportation	Find out why some kinds of transportation have two wheels and others have three or four
13. Be the one to tell how many days until Christmas	Speak in a Christmas play	Paint Christmas cards
14. Find out why popcorn pops	Tell a friend how to make something out of popcorn	Measure oil and popcorn for popping
15. See who can tap marbles the fastest	See what happens when marbles are heated	Play a word and letter game with marbles
16. See how far you can shoot a rubber band	Find out why a rubber band stretches	Make designs on a nail board with rubber bands

[1] *Ibid.*

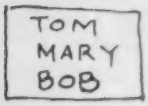
A PICTURE CHOICE (Continued)

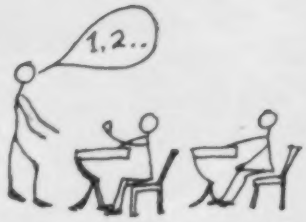
17. Hear a story about trains	Find out what makes a train move	Count cars as a train goes by
18. Count how many planes go up and how many land at the airport	Talk to a pilot	Find out what the wind does to a plane
19. Pretend to be a turtle	See how long it takes a turtle to get across the room	Feed a turtle
20. Listen to a story about a boy and his shadow	Find out why we see our shadow and when	Find ways to see how long our shadow is
21. Talk to a mailman	Find out how many days it will take a letter you mail to get to your house	Sing a song about a mailman
22. See what things a magnet will pick up and what things it won't pick up	Listen to a story about a boy and his magnet	See how many things a magnet will pick up at one time
23. Paint boxes to make a store	Count money in the store	Tell everyone there is a new store
24. Paint with sponges	Find out how much water different sponges hold	Find out where sponges are born and grow
25. Grow cotton	Use cotton to make a picture	Listen to a story about cotton
26. See how much a new leaf grows each day	Use leaves for tracing on paper	Find out which trees don't lose leaves in winter
27. See what happens when you put water on a pine cone	Use pine cones to make an owl	Tell the children in the room about a pine cone
28. See how big something is	See how pretty something is	Tell about something old

A PICTURE CHOICE: PRIMARY LEVEL (GRADES K-1)

Answer Sheet

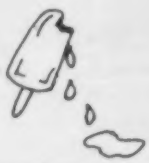
1

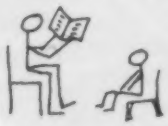




2

3





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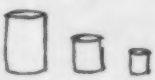

5

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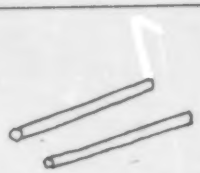


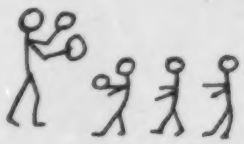
7

A PICTURE CHOICE (Continued)

Answer Sheet

8

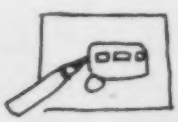
9

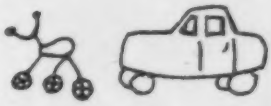


10

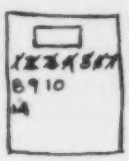
11

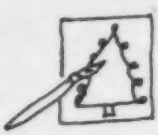
12





13





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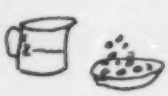

A PICTURE CHOICE (Continued)

Answer Sheet

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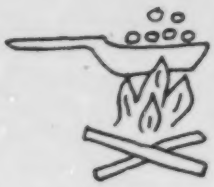
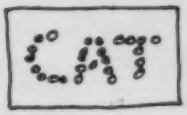

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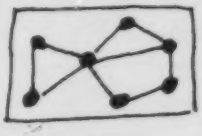

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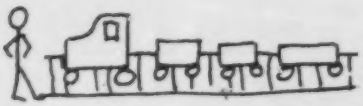
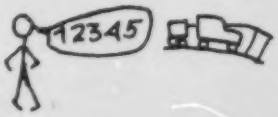

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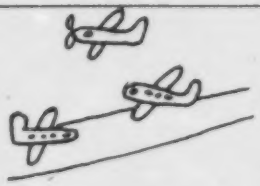

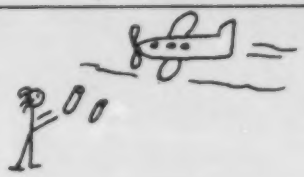

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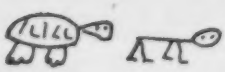
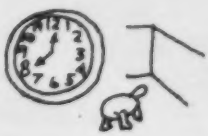

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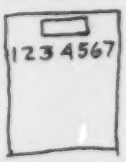

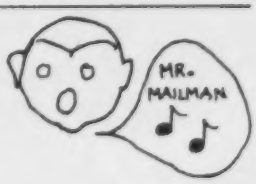

A PICTURE CHOICE (Continued)
Answer Sheet

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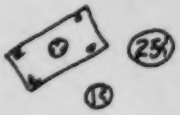
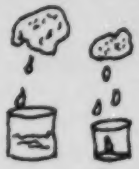
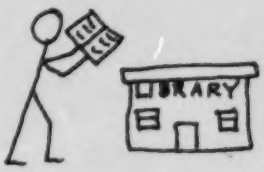
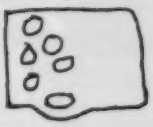
23 

24  

25 

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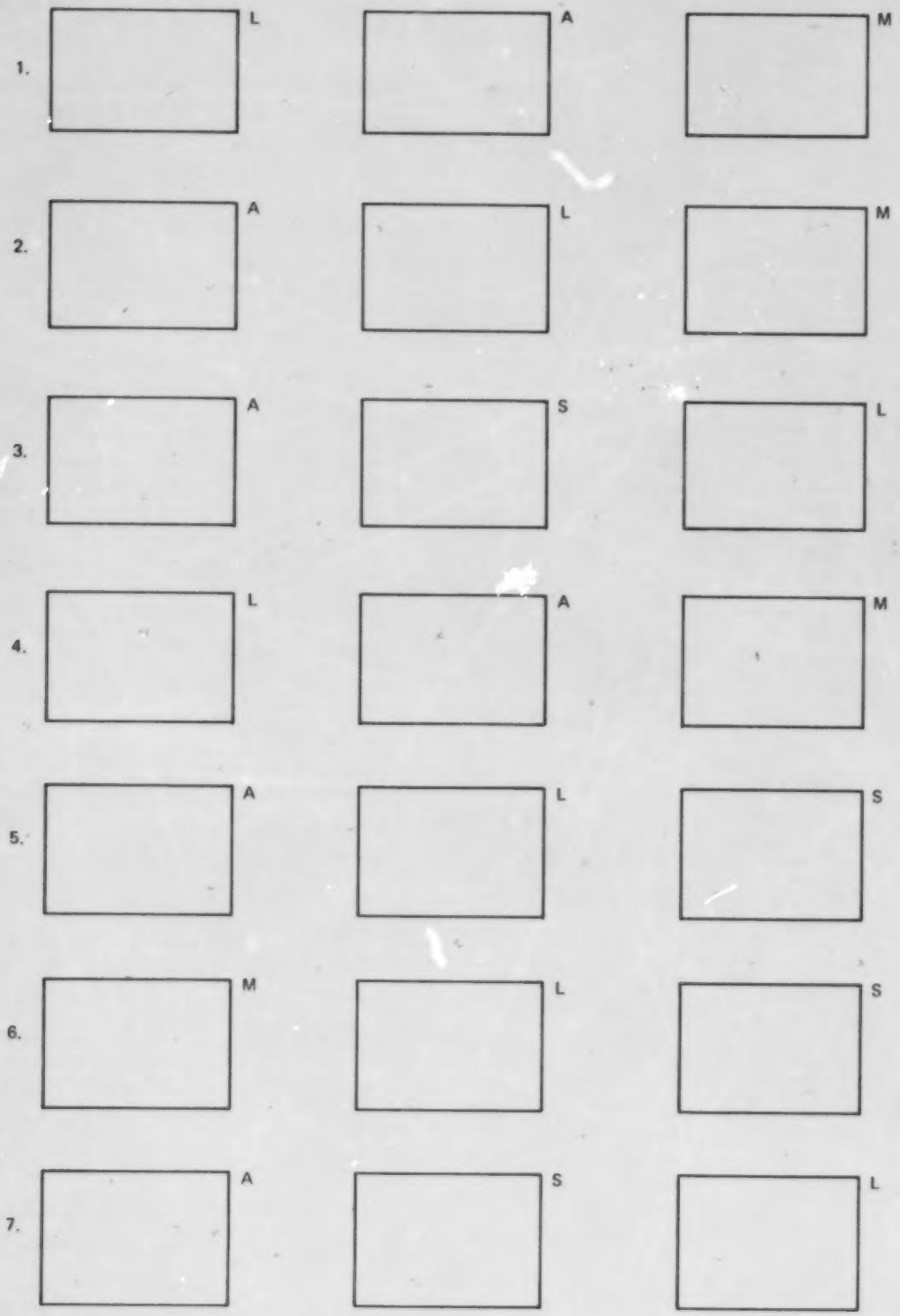
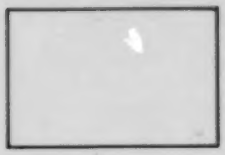
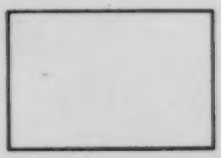
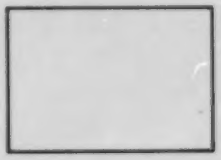
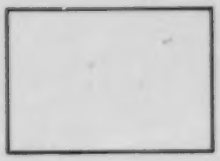
SCORING TEMPLATE

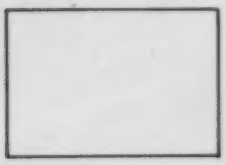
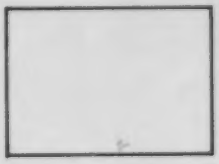


SCORING TEMPLATE

8. S  M  A

9. A S  M

10. M S  A

11.  L A  S

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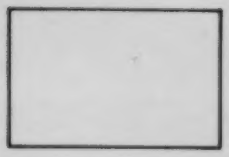
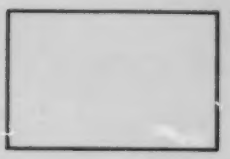
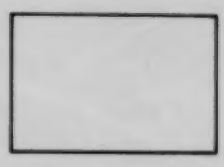
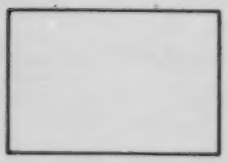
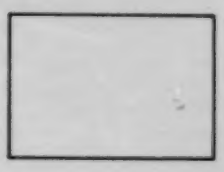
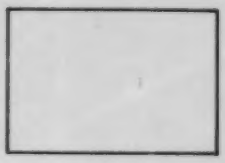
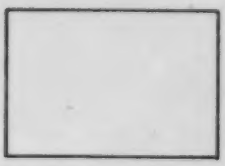
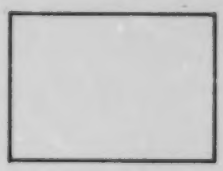
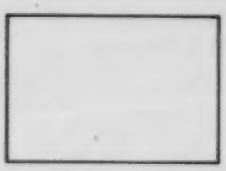
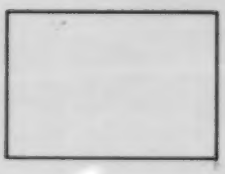
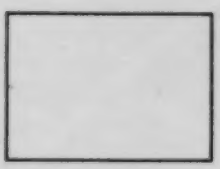
SCORING TEMPLATE

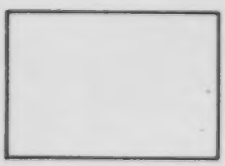
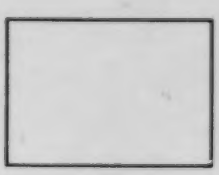
15.  M  S  L

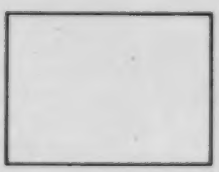
16.  M S  A

17. L  S M

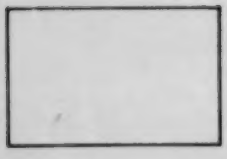
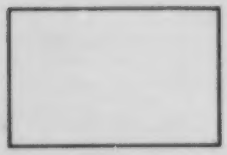
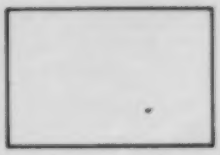
18.  M L  S

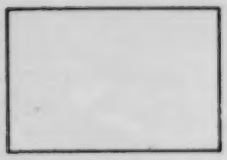
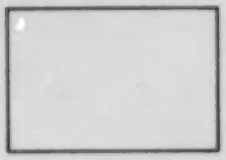
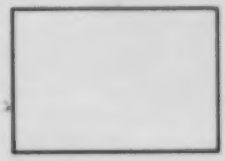
19.  A  M  S

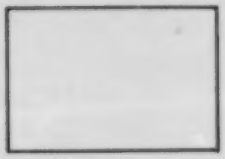
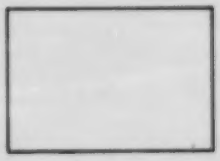
20.  L S  M

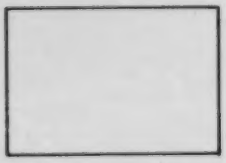
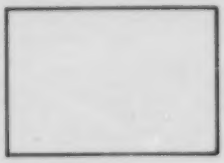
21. L M  A

SCORING TEMPLATE

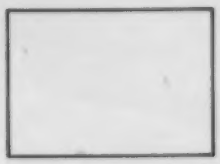
22.  S  L  M

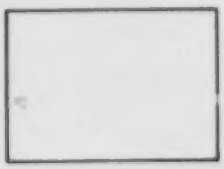
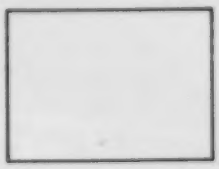
23.  A  M  L

24. A  M  S

25.  S  A L

26. M A S

27. S A  L

28. M  A  L

Q-sorting Technique

Test-directions and scoring procedures, q-sorting technique. This "forced-choice" technique provides the teacher with a means of identifying the child's self-concept and, of greater significance, target behaviors that need attention. The procedure involves having the student fill in the formboard twice. (See Figure 2-35). Self-report No. 1: The student reviews *all* of the behaviors listed in Table 2-6 and, starting with the behavior that is "most like me," records that number in column 1. For example, if the child feels he "annoys classmates," he should record "20" in the "most like me" column. In similar fashion, he records all indications of his "real" self on the formboard. Self-report No. 2 may follow immediately thereafter, or in a day or two. However, on this occasion the student is to record on the formboard indications of his "ideal" self, i.e., how he would like to be.

The two sets of scores are recorded as follows: (See Table 2-7).

1. Test No. 1 (Real Self): Record card number choices in Column S-1. In the example cited previously, a "1" would be placed in the S-1 column to the right of Card No. 20.
2. Test No. 2 (Ideal Self): Record card number choices in Column S-2.

(Note: All numbers recorded for total administrations should range from 1-9.)

3. Enter the difference between the scores for each card in the "D" column. For example, the child who stated he annoys classmates, might indicate that ideally "annoying classmates" is "most unlike him." Thus, his scores would be recorded as follows:

Card No	Column S-1	Column S-2	D	D^2
20	1	9	-8	64

(Rule of thumb: difference scores of "3" or more may be indicative of target behaviors that should be modified.)

4. Total the D^2 scores and insert in the formula. For example:

$$r = \frac{1 - \quad D^2}{200} = 1\frac{200}{200} = 1 = 1.00$$

TABLE 2-6

ITEMS ON THE BEHAVIORAL Q-SORT
(Elementary Level)

1. Performs activities requested.
2. Pokes or hits classmates.
3. Leaves activity area without permission.
4. Scores high on the physical fitness test.
5. Easily distracted.
6. Is well-coordinated.
7. Disturbs classmates by making noise.
8. Is quiet during class time.
9. "Day dreams" often.
10. Follows directions.
11. Smiles frequently.
12. Often taps foot, or fingers.
13. Pays attention to assignments.
14. Performs tasks slowly.
15. Throws objects in class.
16. Performs skills well.
17. Talks out without permission.
18. Successful in athletics.
19. Talks to classmates often.
20. Annoys classmates.
21. Successful in intramurals.
22. Asks teacher questions.
23. Uses free time to practice skills.
24. Recognized by classmates for physical ability.
25. Walks around gym during activity time.

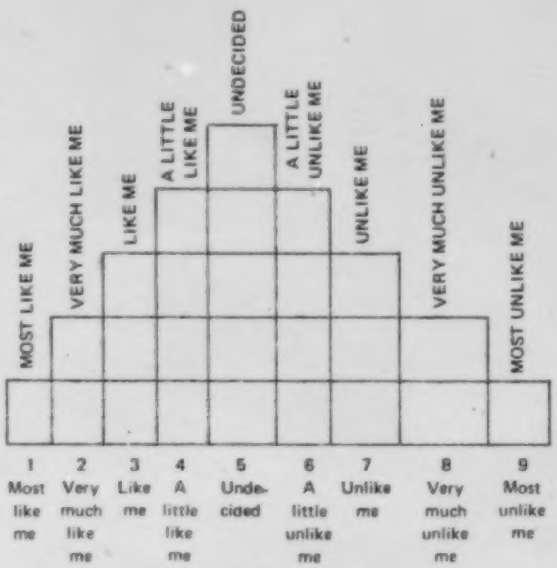


Fig. 2-35 The Formboard

Modified version of "The Behavioral Q-Sort As A Diagnostic Tool," Roger Kroth, in *Academic Therapy*, Vol. 8, No. 3, Spring 1973, pp. 317-330.

TABLE 2-7

BEHAVIORAL Q-SORT RECORD FORM[1]

Name of Subject _____ Sex _____ Date Tested _____

Address _____ Phone _____ Date of Birth _____

School _____ Teacher _____ Grade _____ Age _____

Name of Examinee _____ Relationship to Child _____

Card No.	Column S-1	Column S-2	D	D^2
1				
2				
3				
4				
5				
3				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
			Σ =	

$$r = 1 - \frac{\Sigma D^2}{200}$$

[1] *Ibid.*

An "r" (correlation) of 1.00 indicates a perfect relation between "real" and "ideal," or a well-adjusted child, assuming the child is honest in his responses. The correlation score provides baseline information; it has no other value. Following treatment intervention, the teacher should readminister both tests and determine a second "r" score. With limitations, an increased correlation is reflective of an enhanced self-concept.

Test directions, wear attitude inventory.[1] PLEASE READ CAREFULLY: Below you will find some statements about physical education. We would like to know how you feel about each statement. You are asked to consider physical education only from the standpoint of its place as an activity course taught during a regular class period. No reference is intended in any statement to interscholastic or intramural athletics. People differ widely in the way they feel about each statement. There are no right or wrong answers.

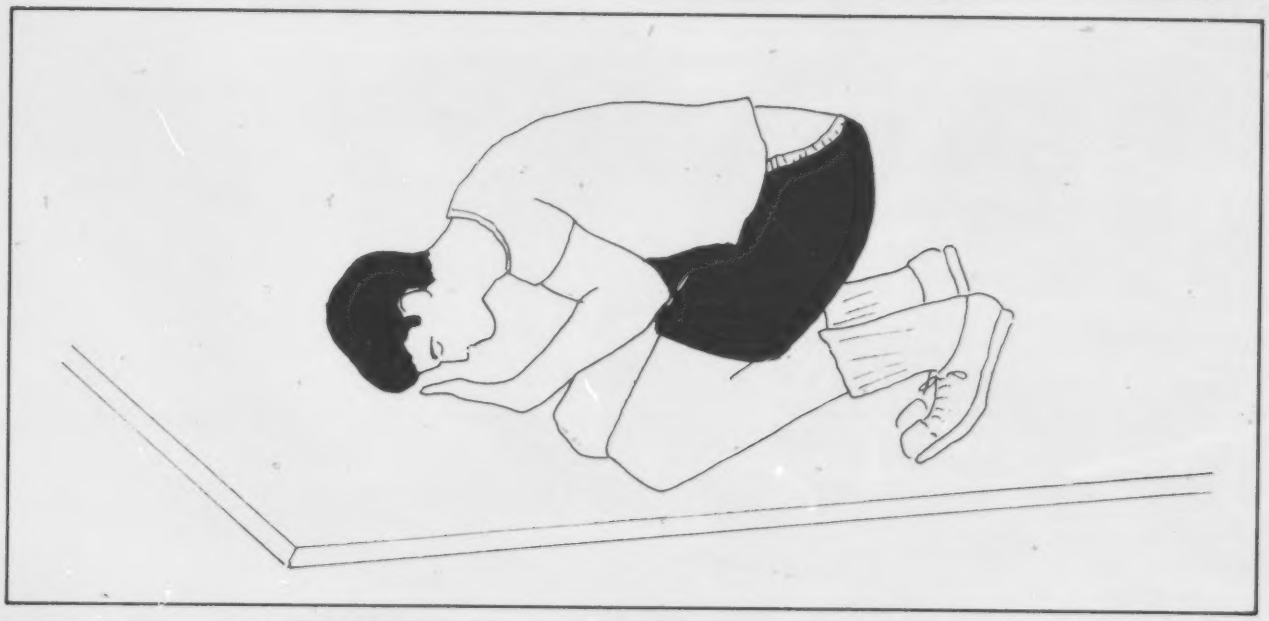
You have been provided with a separate answer sheet for recording your reaction to each statement. (1) Read each statement carefully, (2) go to the answer sheet, and (3) opposite the number of the statement place an "x" in the square which is under the word (or words) which best expresses your feeling about the statement. After reading a statement you will know at once, in most cases, whether you agree or disagree with the statement. If you agree, then decide whether to place an "x" under "agree" or "strongly agree." If you disagree, then decide whether to place the "x" under the "disagree" or "strongly disagree." In case you are undecided (or neutral) concerning your feeling about the statement, then place an "x" under "undecided." Try to avoid placing an "x" under "undecided" in very many instances.

Wherever possible, let your own personal experience determine your answer. Work rapidly, do not spend much time on any statement. This is not a test, but is simply a survey to determine how people feel about physical attention. Your answers will in no way affect your grade in any course. In fact, we are not interested in connecting any person with any paper — so please answer each statement as you actually feel about it. "Be sure to answer every statement." (Administration forms and scoring procedures are located in Appendix F).

(Courtesy of St. Joseph's School for the Blind, Jersey City, New Jersey.)

[1] C.L. Wear, "Construction of Equivalent Forms of an Attitude Scale," *Research Quarterly, XXV*, pp. 113-119. (Courtesy of AAHPER).

TAPE ASSESSMENT PROCEDURES



CHAPTER THREE

TASSESSMENT PROCEDURES

The assessment of performance is the second step in the individualization of a program for students with communication problems. Individual strengths and weaknesses can be determined only by the proper diagnosis of pupil performance.

Unfortunately, teachers are taught to diagnose performance almost solely on the basis of "product" information (test scores), but lack the observational skills to focus on the "process" information provided by the child, namely *how* he performs the specific task.

The Project ACTIVE Teacher Training Program incorporates both appraisal strategies, objective and subjective. Teachers are trained to assess "product" and "process" information so that they can compile a complete "picture" of each child's performance. This chapter provides a systematic procedure for assessing pupil progress effectively and efficiently.

ASSESSMENT

Partially-sighted or Blind

Objective appraisal. Review all test data; note relative strengths and weaknesses.

Subjective appraisal. Carefully observe student performance during all testing. Record anecdotal remarks that focus on the process – how the child performs the skill. Particularly observe how the child performs the tasks of daily living. For example, record remarks regarding the blind subject's general posture (static and dynamic), pattern of locomotion, and socialization with his or her peer group.

Fig. 3-1 Typical Posture of Blind Student

Hard-of-hearing or Deaf

Objective appraisal. Review all objective test data (particularly tests of balance).

Subjective appraisal. Note mechanisms by which student carries out test activities (e.g., position of head, movement of arms and body while maintaining balance on beam.) Does he pick up his feet while walking, or tend to shuffle? Is he generally graceful?

Autistic

Objective appraisal. Review the objective data from any of the test items performed by the child. Does he mingle with other children? Determine the time length. Does he make "eye" or "physical" contact with others? Determine the time length. Record the number of conversations per period.

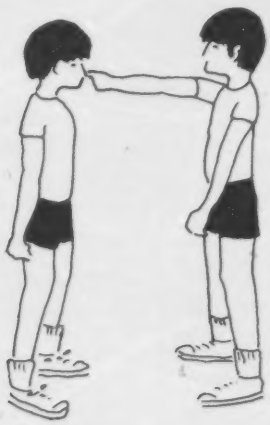


Fig. 3-2 Establishing "Eye" Contact with the Autistic

Subjective appraisal. Does the student seem friendlier? Indicators could be facial expressions or tone of voice. Does he initiate conversations? Even if he shuns physical contact, does he appear interested in activities?

Aphasic

Objective appraisal. Review objective data from all tests. Record the times the child is actively involved in the physical activity program upon first admittance to D&A.

Subjective appraisal. What is the students attitude during class participation? Does he enjoy activities? Would he participate voluntarily? Does he participate in any after-school programs?

SUMMARY

The "key" to a successful individualized prescriptive program is the implementation of sound assessment procedures. Regardless of the instrument used, it is essential that equal importance be given to the recording of the "how" of pupil performance. At the present time, too much emphasis is placed on "what" the student does.

Developing the ability to assess pupil performance subjectively requires training designed specifically to cultivate the teacher's observational powers. A successful technique used in the Project ACTIVE Teacher Training Program is to pair two teachers with one child during the testing periods. One teacher observes terminal behavior and records the raw score, while the partner observes *how* the child performs the specific components of the test and records anecdotal remarks. After a period of time, the teachers reverse their assignments. At the end of each session, the teachers discuss the total performance of the child on each task.

NOTES:

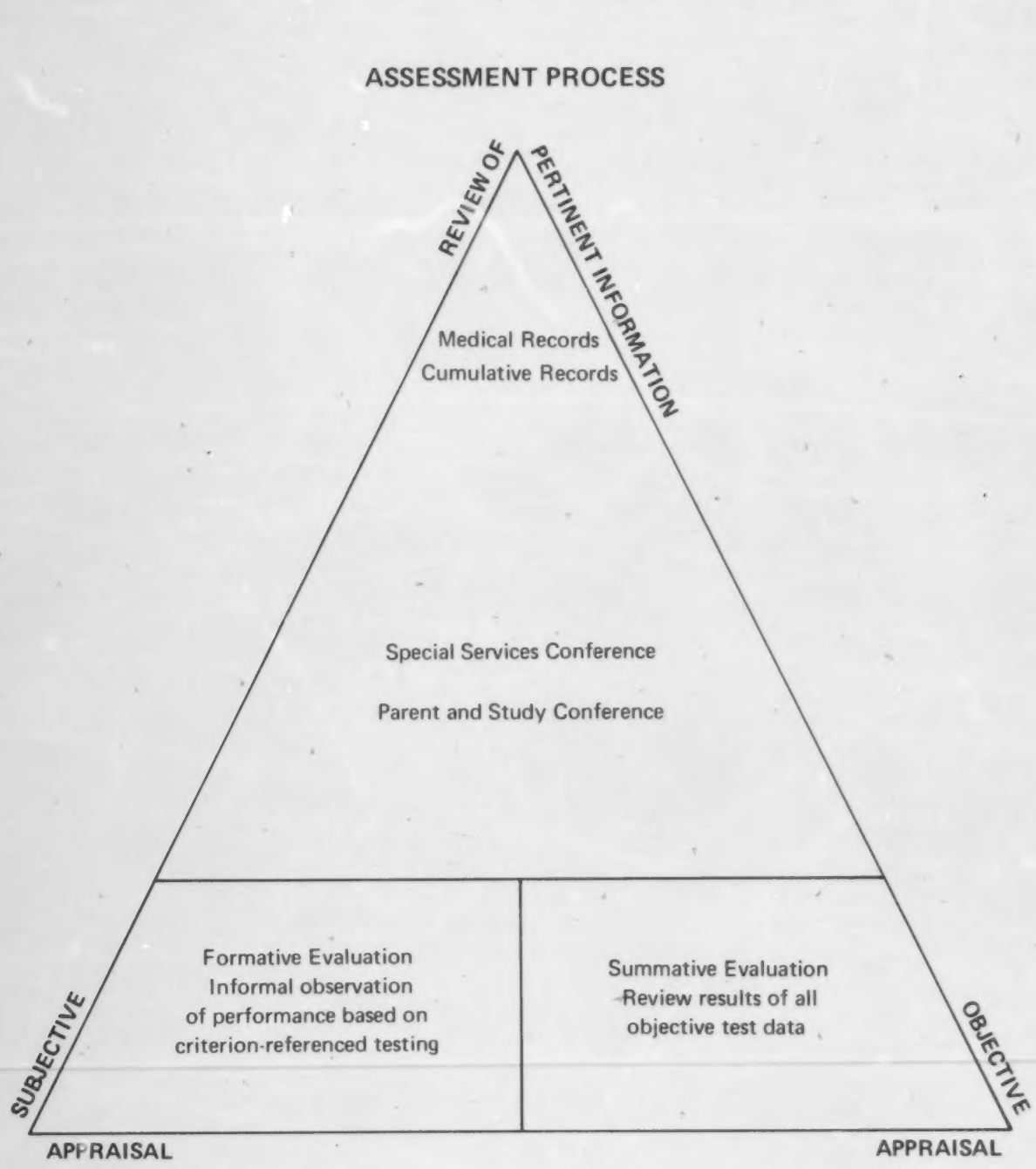
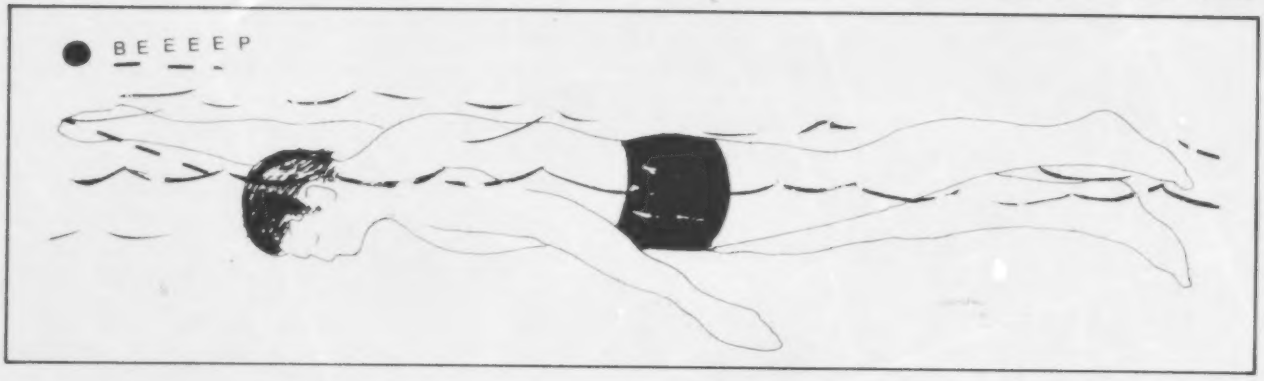


Fig. 3-3 Assessment Process

TAPE PRESCRIPTION PROCEDURES



CHAPTER FOUR

TAPE PRESCRIPTION PROCEDURES

Previous chapters have suggested guidelines for testing and assessing the performance of the visually, auditorily, autistic, or aphasic child to provide the teacher with information necessary to prescribe an individualized physical activity program. However, a prescriptive program cannot be presented in any logical sequence because of the diversity of the problems manifested by children with communication disorders. Proper prescription requires that the teacher analyze each child's behavior and prescribe accordingly. Each program should focus equally on the child's disabilities and abilities.

Since there is a need for general prescriptive guidelines, particularly for the practitioner who has not been exposed to the handicapped population, the following suggestions and student learning experiences are provided.

PRESCRIPTIVE GUIDELINES

Visually Handicapped

Movement exploration is beneficial in developing use and control of the body. Body image, directionality, laterality, and special relationships should be included in the program.

Many of these children do not have the slightest concept of how various sports are played. They do not know how to dribble a basketball, swing a bat, or know what various pieces of equipment look like. Thus, there is need for an initial orientation period in which the blind student can develop his sense of touch (tactile) and his awareness of his body parts in various positions (kinesthesis). Demonstrations should be conducted on an individual basis. Skill teaching should be sequenced as follows:

1. The teacher or another student assumes the initial body position.
2. The blind student develops a tactile sensation of the initial position by exploring the performer's body position with his hands.
3. The blind student assumes the initial position so that he can develop an awareness and a kinesthetic "feel" for the position (with corrective feedback provided by the demonstrator).
4. The same sequence is provided through the performance and termination phases of the skill.

Blind children tend to take short, faltering steps because of their fear of colliding with an object. Running

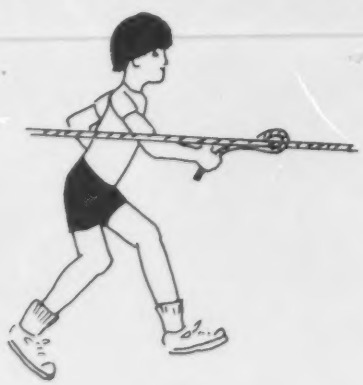


Fig. 4-1 Guidewire Running

with a partner will help to overcome this fear and improve the child's locomotor pattern and skill development. Once the student has gained confidence, he should be provided the experience of running alone, first, by maintaining hand contact with a directional guidewire and finally by being guided by verbal cues or an audible beeper.[1] Robert D. Mason of the American Junior Bowling Congress, has devised two systems whereby the blind can bowl quite successfully. The directions are as follows:[2]

A. Bowling with the "Rail" –
   1. *Strike Ball* – Hook the crook of the elbow of the guiding arm over the rail, adjust rail position so that the ball is lined up with the center of the lane when hanging at the side of the bowler in his delivery hand. The rail will now remain in this position for all succeeding shots.
   2. *Left-side Spares* – #4-7 and 8 pins. Hook rail under the arm pit of the guiding arm; this will line the delivery arm up with the above pins.
   3. *Right-side Spares* – #6-9 and 10 pins. Hold rail in hand of guiding arm with the arm extended straight out to the side parallel to the floor. This will line up the delivery arm with the above pins.
   4. *Center Spares* – Return to the strike or position #1. This position will cover the #1-2-3 and 5 pins.

B. Bowling without "Rail" – Many blind bowlers prefer not to use the rail. These people use the ball return as a starting position from which to adjust. This is accomplished by resting the leg against the side of the ball return and then side stepping to gain the proper position for various shots. Since the ball return is between the two lanes used in a match, this will entail using the left leg on the right lane and the right leg on the left lane. It is necessary to develop a uniform side step. The moves in this method are usually as follows: (Right Lane) rest left leg against the ball return, Strike Ball and/or Center Spares two side steps to the right. Right -side Spares, three side steps to the right. Left-side Spares, one side step to the right. When using the left-hand lane, the right leg will rest against the ball return. The Strike Ball or Center Spare move will remain the same, two side steps to the left. Left-hand Spares, three side steps to the left. Right-hand Spares, one side step to the left.

Assistance should be given the bowler when trying to establish the proper length of side step. Then, the only assistance necessary is to guide them to the lane. These people develop a sense of hearing that can generally tell them approximately how many pins have been knocked down. Of course, assistance is needed to call out the pins remaining. Some blind bowlers roll a hook ball; this creates an almost impossible problem in picking up the #6 or 10 pins. Try to develop a straight ball with the thumb of the bowling hand at about 12 o'clock at the time of delivery.

When teaching beginners, it is advisable to stand the person at the foul line in the proper position and deliver the ball with just a pendulum swing and no steps. This later can be developed into one, two, or three steps for an approach. The shorter the length of the step, the easier it is to maintain a straight line. Rolling the ball smoothly and slowly in the beginning is of the utmost importance, for as soon as the ball is thrown, or rolled too hard, the person tends to pull the arm across the body and angle the ball.

Persons not totally blind should stand about two feet back of the foul line with the delivery arm in line with the center or "big" dot on the floor at the foul line. Make sure that their shoulders are square to the foul line and then let them roll over the center dot for the Strike Ball and Center Spares, the dot to the right of center for the #3-6 combination or the 6-9, move to the 2nd dot to the right of center for the #6 or the 6-10 combination or the #8 pin, second dot to left of center for the #4 pin or the 4-7 combination. In Halifax, Nova Scotia, a man with impaired vision was observed who refused any help; he used a pair of field glasses to determine the pins that remained standing and then used the adjustment method explained above. His average is 130.

It is recommended that the partially-sighted or blind student be integrated in the regular physical education program during appropriate units of instruction such as wrestling, weight training, tumbling, gymnastics, and swimming.[3] During team sports such as softball, basketball, volleyball, and flag football, the student should be scheduled in the D&A program.

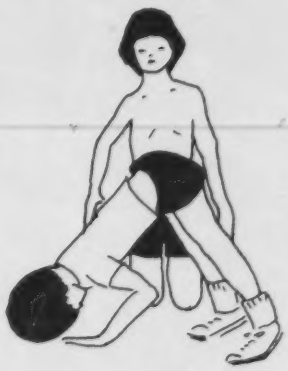


Fig. 4-2 Skill Development through Tactile Exploration

[1] Manufactured by the American Printing House for the Blind.

[2] Robert D. Mason, American Junior Bowling Congress. Reprinted by permission of AAHPER.

[3] Angelo Montagnino, Jr., "Visually Handicapped Children Can Be Integrated In Regular Physical Education Classes." New Jersey Commission for the Blind.

Suggested teaching and safety cues for working with the visually handicapped:

1. Require the partially-sighted to wear glass guards.
2. Standardize the placement of mats, barbells, apparatus, and other equipment so that the blind student can learn the layout and thus move around with confidence.
3. Verbalize constantly and use other audible cues so that the student can orient his body in the direction of the sounds.
4. When teaching skills, emphasize strongly the development of the student's tactile and kinesthetic senses.

Hard-of-hearing or Deaf

Cooperative games and activities are important for the auditorily handicapped students since they tend to have a low frustration level and may be socially immature. Activities at the elementary level should focus on movement exploration and a variety of balancing activities. The deaf tend to be aggressive and will readily accept competitive activities. Auditorily handicapped children can participate in most athletic activities and games but not in those skills or stunts which require the ability to orient the body in space. For example, tumbling skills and stunts in the supine or prone position are contraindicated.

Suggested teaching and safety cues for working with the auditorily handicapped:

1. Provide printed rules, regulations, and scoring procedures.
2. Always face the student when talking.
3. Provide a "buddy" during game situations so that he can alert the deaf student when the whistle blows.
4. Be wary of permitting the student to climb the gym rope or perform on apparatus that is above floor level.
5. Become conversant with hearing aids; learn how to change batteries and check for a proper fit to avoid irritations.

Autism

General prescriptive suggestions would include the provision of a variety of movement education experiences. The teaching method used should incorporate the following features:

1. Make the learning experiences simple and concrete.
2. Use *gentle persuasion* to insure performance of the act.
3. *Reinforce immediately* the most minute accomplishment.
4. Have the child perform the act accomplished *repeatedly* until he has "internalized" the skill.
5. Vary the skill constantly so that motor *patterns* are learned rather than discrete motor *skills.*
6. Once the skill is learned use the skill in an activity in which the child and teacher perform together. Eventually try to involve other children also.

Aphasic

The aphasic child unable to communicate because of either motor or receptive aphasia should receive special attention.

The teaching method should include, as a major technique, demonstration by the teacher or teacher assistant.

The aphasic child may not understand verbal directions but is able to duplicate physical activities that he sees.

Repetition with tactile and kinesthetic cues will help establish the skills.

Reinforcement and further training will enhance skill retention.

Student Learning Experiences

1. **Devise and Participate in Verbally-Guided Throwing-Test and Games for the Partially-sighted or Blind Student, Grades K-12.**

Teacher's Role.

a. Explain and demonstrate "kinesthesis" (an awareness of the body parts in various positions) and how its development can aid the partially-sighted or blind student.
b. Explain and demonstrate "laterality" (left-right concepts) and how its development can aid the partially-sighted or blind student.
c. Explain and demonstrate directionality and how its development can aid the partially-sighted or blind student.
d. Explain and demonstrate spatial relationship and how its development can aid the partially-sighted or blind student.
e. Review use of the motor ability target-throwing test.
f. Pair sighted-students with the non-sighted for testing purposes.

Student's Role.

The *sighted student* is to:

a. Review testing and scoring procedure for administering the motor ability target-throwing test.
b. Provide verbal feedback for each of his partially-sighted or blind partner's attempts (10). For example, if the object strikes low to the left, he should comment, "Raise the next attempt slightly upward and to the Right."
c. Record his partner's total score for ten attempts (pre-test).
d. Participate with his partner in other verbally-guided games.
e. Administer post-test at periodic intervals and note progress.
f. Participate with his partner in games and activities to strengthen laterality concepts.
g. Participate with his partner in games and activities to strengthen directionality concepts.

h. Participate with his partner in games and activities to strenghthen spatial relationship concepts.

The *partially-sighted or blind student* is to:

a. Perform the test as directed, while concentrating on verbal clues.
b. Attempt to "feel" the arm and hand position as his accuracy improves.
c. Participate in other verbally-guided games for laterality, directionality and spatial relationship concepts.
d. Attempt to throw accurately at the target, using only the kinesthetic "feel" of the arm and hand position.

2. **Devise and Participate in Verbally and Sound-guided Running.**

a. If children are apprehensive, initial runs may be made using a line with a movable handle to guide the child.
b. The blind student runs 25 yards (verbally-guided) in a lane 36 inches wide. A sighted partner helps the runner stay in the lane by voice cues (e.g., "lean left" or "lean right").
c. The blind student is guided only by voice or clapping of a sighted partner, with no other verbal cues.

3. **Devise and Participate in other Verbally-Guided Tests and Activities for the Partially-sighted or Blind Student, Grades 3-12.**

Teacher's Role.

a. Devise tests and games for the blind student in grades K-8.
b. Assist and guide the partner in developing te[illegible] and devising games that enhance the blind or pa[illegible]ally-sighted student's kinesthetic performance, grades 9-12.

Student's Role.

The *sighted-student* is to:

a. Devise tests and games to assess and improve the partner's ability to perform skills that involve movement such as tumbling, and proper body mechanics, bowling, etc., grades 9-12 (e.g., bowling via use of the auditory goal-locater).
b. Participate with his partner in track and field events, tumbling gymnastics, wrestling, swimming, and weight training.
c. reassess partner's performance at periodic intervals.

The *partially-sighted or blind student* is to:

a. Perform all tests and games as directed, while focusing on the verbal, kinesthetic, and tactile cues.
b. Endeavor to develop kinesthetic and tactile abilities to the extent that he can perform the skills without verbal assistance.

Safety factor for the Blind: The teacher should use a specific signal such as a special bell or whistle, that means stop all activity immediately and remain motionless.

4. **Devise and Participate in Tests and Games for the Hard-of-Hearing or Deaf Student, Grades K-12.**

Teacher's Role.

a. Administer the balance, postural orientation, and ocular pursuit test items from the Motor Ability Test Battery to students in grades K-8. (Refer to Ocular Pursuit Test cited below.)

Ocular Pursuit Test:

Monocularity, Binocularity, Convergence Test Description:

Holding a pencil 20-24" from the subject's eyes, the instructor moves the pencil horizontally, vertically, diagonally, (both directions) and in a circle. The subject is requested to follow the movements with both eyes, without moving his head. (Move pencil in 18" arc with head as center of circle).

Assessment

tracking horizontally _____ jerky pattern _____

tracking vertically _____ midline problem _____

tracking diagonally _____ loses object _____

tracking circle _____ lazy eye _____

Remarks: _____

_____

_____

_____

_____

_____

b. Devise games to enhance factors listed in "a" above.
c. Print or type rules of the games.
d. Demonstrate rules of games.
e. Pair the deaf students with students that do not have a communication disorder, grades 9-12.
f. Assist and guide partners in developing tests and devising games that enhance the deaf student's balance, postural orientation, and visual scanning ability.

Student's Role.

The *partner* is to:

a. Devise tests and games to assess and improve the deaf students balance and use of his eyes.
b. Notify his buddy "when play ends" during team games.

The *Hard-of-hearing or Deaf student* is to:

a. Perform all tests and games as directed, while concentrating on developing his kinesthetic and visual apparatus.

Safety factor for the Deaf: The teacher should use a special signal, (such as, turning off gym lights to indicate that all students immediately stop all activity and face front of gym.

4. Devise and Participate in Games and Activities for the Autistic Child, Grades K-12.

Teacher's Role.

a. Explain and demonstrate various games and activities to strengthen weaknesses indicated on the physical fitness and motor ability evaluations.
b. Explain and demonstrate activities that the child may like in order to gain his confidence.
c. Review use of the physical fitness and motor ability evaluations.

Student's Role:

The *Autistic child* is to:

a. Perform the test as directed, while focusing on the verbal, kinesthetic, and tactile cues.
b. Endeavor to develop skills and activities to the extent he can perform without verbal assistance.

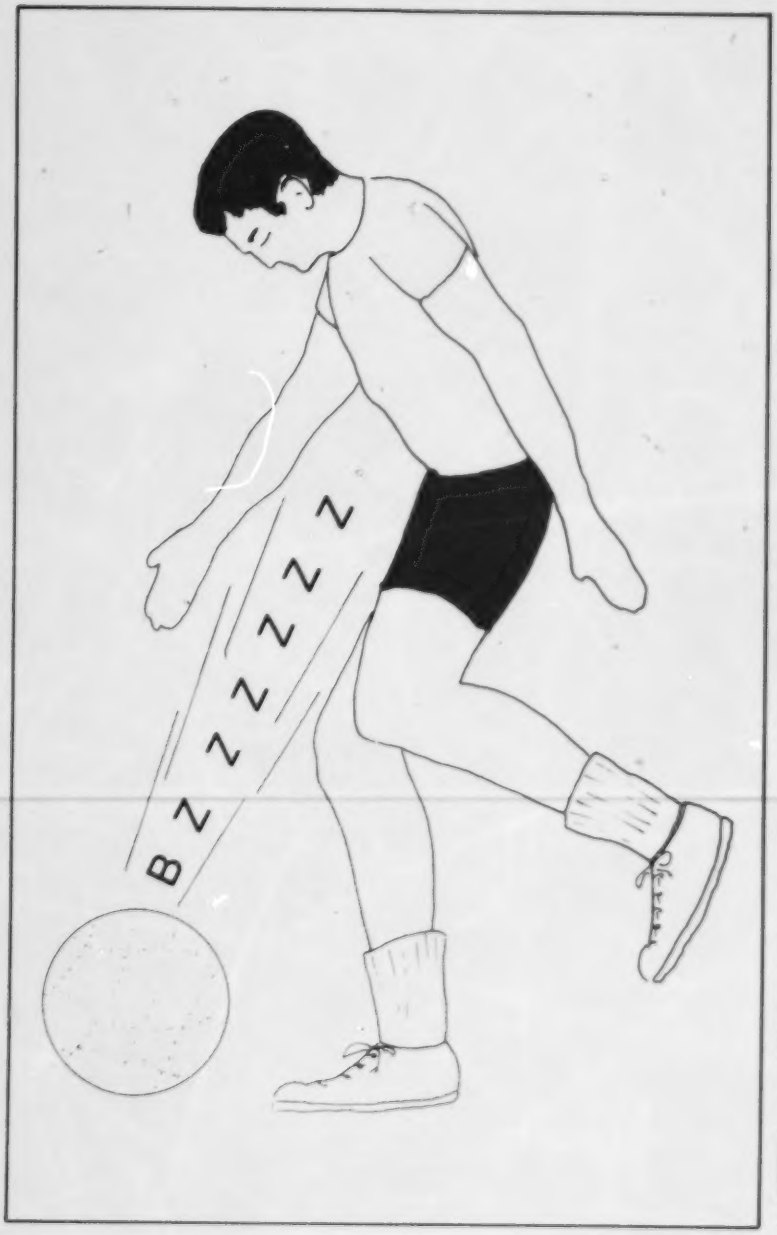
SUMMARY

The implementation of an individualized physical education program that will benefit the child with communication problems requires a close working relationship between the physical educator, the school nurse, the learning disability specialist and the family physician. The following suggestions will aid the teachers in the attainment of that goal.

1. Obtain parental and medical approval for student involvement in the adapted physical education program.
2. Obtain a list of approved activities.
3. Review the student's medical and academic records.
4. Administer appropriate pre-test instrument to gather additional baseline information.
5. Prescribe an instructional program based on all information collected. (A recommended teaching strategy is to strengthen those sensory modalities that have not been impaired to compensate for the handicapping condition which is manifested. For example, overdevelop the blind child's ability to hear, feel, and orient his body in space.)
6. Counsel the student and explain the values to be derived from participating in the recommended exercises.
7. Integrate the student in the regular physical education classes whenever the activity and physical environment are appropriate.

(Courtesy of St. Joseph's School for the Blind, Jersey City, New Jersey.)

TAP EVALUATION PROCEDURES



CHAPTER FIVE

TAPE EVALUATION PROCEDURES

Previous chapters have focused on gathering baseline information, assessing performance and prescribing activities. This chapter evaluates student progress at the end of a specific block of time so that a decision can be made regarding subsequent programming. Evaluation differs from assessment in that "assessment" implies the constant gathering of "process" information so that the prescription can be modified as needed; whereas "evaluation" is viewed as the gathering of "product", or terminal information so that an administrative decision can be made.

The first section of this chapter provides suggested guidelines for ascertaining whether a student should:

1. Be returned to the unrestricted program.
2. Continue in the Developmental Program with the same prescription.
3. Continue in the Developmental Program with a modified prescription.
4. Be scheduled in the unrestricted program and the Developmental Program.

Other sections describe a procedure for informing parents of their child's progress and provides a summary of the TAPE process based on an actual case study.

SUGGESTED EVALUATIVE GUIDELINES[1]

To evaluate pupil progress properly, it is necessary to review all data collected. The evaluation should be conducted every nine weeks. At each terminal period, the teacher should:

1. Readminister the Township of Ocean Motor Ability and Physical Fitness Tests.
2. Compute MAI's and PFI's
3. Readminister all other appropriate informal test instruments
4. Record anecdotal remarks regarding process changes
5. Compare the pre- and post-test objective and subjective appraisals.

If a student achieves an MAI or PFI score of 50 or more, with no single component stanine score of less than 4, he is to be released from the D&A program. If these minimal standards are not achieved, further evaluation is necessary. Attempt to discern whether the lack of improvement was attributable to improper prescription. If this is the case, determine why the prescriptive tasks did not improve performance. Were the tasks too easy, too difficult, not performed correctly, or not practiced sufficiently? Represcribe to correct the problem. If the problem is attributable to poor motivation, then prescribe other tasks which focus on the same factors, but may be more appealing to the student. (See Chapter VI for sequential tasks.) Other approaches to solving the motivation problem: make the tasks more meaningful by having students test one another; record their daily progress; and use any other comparable strategy which enables the pupils to note the concrete benefits derived therefrom.

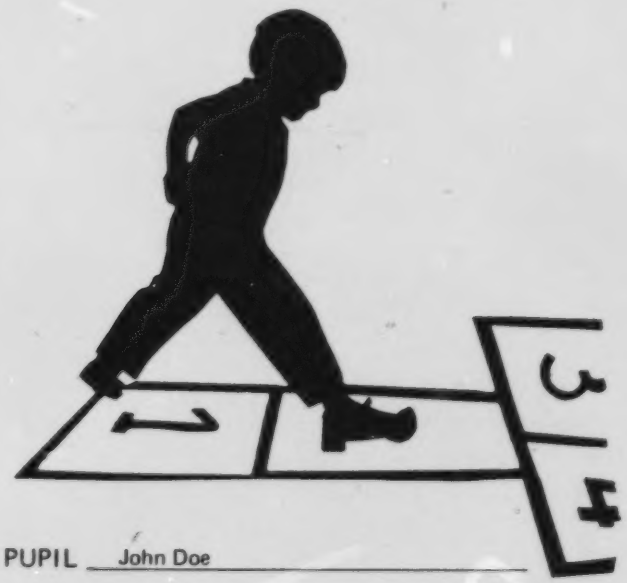
If the student has not achieved the appropriate MAI or PFI score, but shows steady progress toward his goal the teacher may elect to continue the present prescriptive pro-

[1] The teacher should always recognize the fact that evaluation is a continuous process and cannot be restricted to a precise testing schedule. It might be advisable to retest a student prior to the pre-planned schedule because of his performance. An interim evaluation insures that the individual prescriptive process is being implemented to the fullest extent.

TABLE 5-1

MOTOR ABILITY PROGRESS PROFILE

(Courtesy of the Township of Ocean School District)



TEACHER COMMENTS

Your child has completed nine weeks in our Adapted Physical Education program. However his retrogression in ***balance*** (from 90" to 65") suggests he would benefit from continuation in the program.

His performance may be attributable to an inner ear problem. It is recommended that you have your son checked by your family physician to ascertain whether a problem exists and/or activities he wants prescribed.

PARENTAL COMMENTS

PARENT'S SIGNATURE _____

PARENT WISHES CONFERENCE YES ☐

NO ☐

PUPIL John Doe

GRADE 3 YEAR 1974

CLASSROOM TEACHER Mrs. F. June Graf

PUPIL PROGRESS REPORT TO PARENTS

It is important that parents be made aware of the progress of their child in the Developmental Physical Education Program. Table 5-1 provides a suggested format for reporting to parents. The form provides a means of indicating the progress the child makes in terms of each test item and each factor. Provision is also made for parental comments and requests for a conference.

gram for another nine weeks. This decision should be based on all data available on the student such as:

1. Personal and medical history, as it relates to motor activity.
2. The teacher's subjective observations.
3. The student's rate of improvement in specific component areas.

TEST ITEM	HIGHEST POSSIBLE SCORE	PRE-TEST YOUR CHILD'S SCORE	POST-TEST YOUR CHILD'S SCORE
Gross Body Coordination			
1. Walk	2	2	2
2. Creep	2	1	2
3. Climb-stairs	2	2	2
4. Skip	2	1	1
5. March-in-place	2	1	2
Total Maximum Points	10	7	9
Balance and Postural Orientation			
1. Tapered balance beam walk	168"	90"	65"
Eye and Hand Coordination			
1. Catch	3	2	2
2. Ball bounce and catch	3	2	3
3. Touch ball swinging laterally	3	3	1
4. Touch ball swinging fore and aft	3	3	1
5. Bat ball with hand	3	2	2
6. Bat ball with bat	3	1	1
Total Maximum Points	18	13	10
Eye and Hand Accuracy			
1. Throw – right hand	9	6	6
2. Throw – left hand	9	3	6
Total Maximum Points	18	9	12
Eye and Foot Accuracy			
1. Kick right foot	9	3	6
2. Kick left foot	9	2	2
Total Maximum Points	18	5	8

Case Study: John, a hard-of-hearing student, was referred for testing by his classroom teacher who noticed he had extreme difficulty orienting his body posturally during various class activities. Upon being tested by the D&A teacher, John scored a 90 on the tapered balance beam test.

John's prescription focused on gross body coordination, eye-hand coordination, eye-foot accuracy, and balance-posture orientation, items in which he scored very low on the test. After nine weeks John was retested. It was noted that his gross body coordination scores improved significantly; however, his balance-postural orientation retrogressed. As a result of his performance, John's progress report suggested that since his balance-posture orientation did not improve during the nine-week period, perhaps it would be advisable to have his balancing center in the inner ear checked by the family physician. A change in prescription was implemented with activities focused on John's balance-posture orientation. After nine more weeks John was tested a third time. His score on static and dynamic balance rose to 120. Upon the recommendation of the D&A teacher, John was released from the program.

John's case study demonstrates a synthesis of the individualization of a motor activity program via the TAPE process. The process involves:

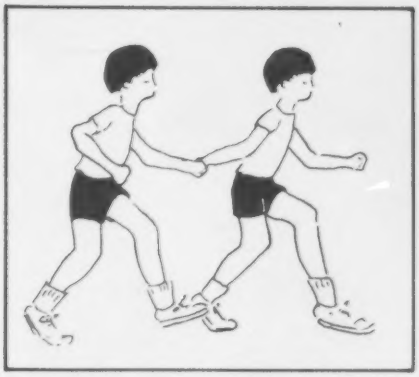
SUMMARY OF THE TAPE PROCESS

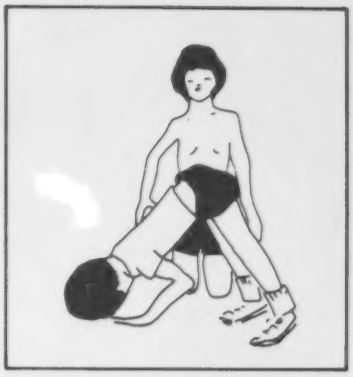
The sequence the teacher uses for individualizing instruction involves:

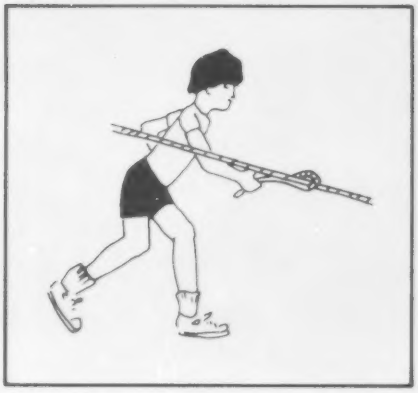
T Testing the student to gather baseline data
A Assessing the individual performance of the student
P Prescribing a sequentially developed program of individualized activities
E Evaluating student progress at periodic intervals

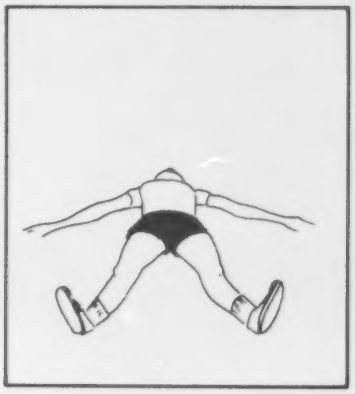
(Courtesy of St. Joseph's School for the Blind, Jersey City, New Jersey.)

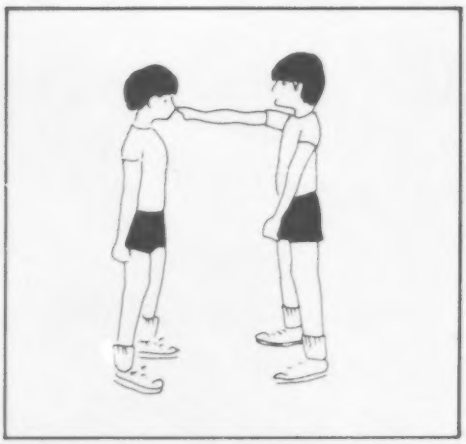
RESOURCE TASKS AND ACTIVITIES

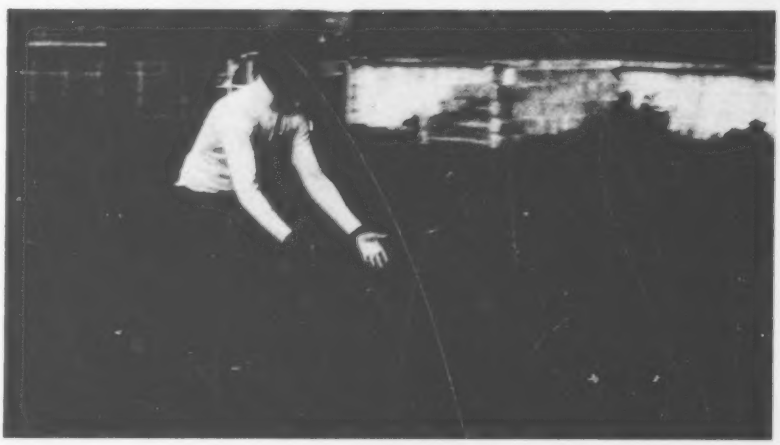












CHAPTER SIX

RESOURCE TASKS AND ACTIVITIES[1]

The tasks and activities in this chapter are structured to provide a cluster of student learning experiences that will enhance the performance of students with communication problems. The chapter includes sections which provide a variety of activities addressed to the following motor and physical factors:

Gross Body Coordination
Balance and Postural Orientation
Eye-Hand Coordination
Eye-Hand Accuracy
Eye-Foot Accuracy
Arm and Shoulder Strength
Abdominal Strength
Explosive Leg Power
Cardiorespiratory Endurance

As the teacher identifies deficiencies, he need only refer to the appropriate section for prescriptive tasks. Although an effort has been made to sequence the tasks from the simple to the complex, they should be used with discretion. The unique needs of each learner may necessitate modifications of either the tasks, or their sequential arrangements. The overriding concern of the educator is to *select and prescribe those tasks that will enable each individual to achieve success.* (See Appendix G for supply and equipment needs necessary for program implementation.)

GROSS BODY COORDINATION

Gross body coordination is the ability of the child to perform specific overall body movements such as creeping, crawling, walking, and hopping. The specific gross motor skills presented to enhance individual performance are walking, creeping, marching-in-place, stair climbing, and skipping.

[1]The tasks and activities presented have not been grouped for each handicapping condition to avoid repetitiously presenting the same experiences. Thus, the teacher should select the activities deemed appropriate for each child.

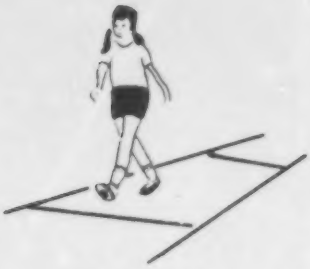


Fig. 1 Walk

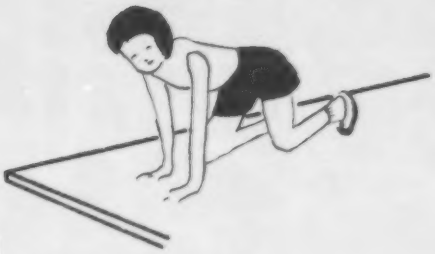


Fig. 2 Creep

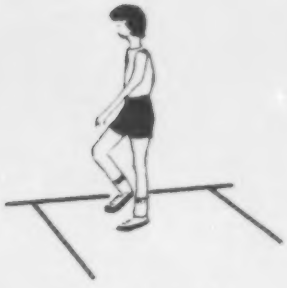


Fig. 3 March-In-Place

Fig. 4 Stair-Climbing

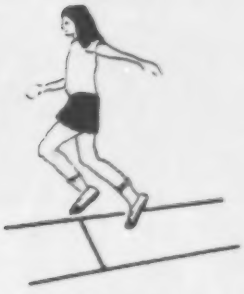


Fig. 5 Skip

1. Name: Know Your Body
   Equipment: None
   Description: Ask the child to point to the parts of the body (i.e., the foot, ball of the foot, the toes, the arch, , ght arm, right leg, left arm, left ankle, right ankle, left knee, and right knee).
   Teaching Hints:
   - Incorporate identification of various parts of the body into game such as "Simple Simon Says."

2. Name: Walking Forward On A Straight Line of Mats[1]
   Equipment: Six one-foot square rubbermats, 4 inch diameter circle painted in the center of each square.

Fig. 6 Walking Forward on Straight Line of Mats

   Description: Place mats about six inches apart. Have the child step in the center of each mat in sequence until all six mats have been stepped on. Indicate which foot to start with.
   Teaching Hints:
   - Space mats according to the size of the children.
   - Use different colored mats.
   - If mats are not available, use any material to construct square such as tape, paper, white shoe polish, etc.
   - If the child has trouble differentiating left from right, mark L for left foot and R for right foot.
   - Have the child walk backward using same pattern.

3. Name: Walking Forward on Staggered Mats[2]
   Equipment: Same as above.
   Description: Place mats in staggered order. Same procedure as previous task except that steps are not in line.
   Teaching Hints:
   - Same as above.

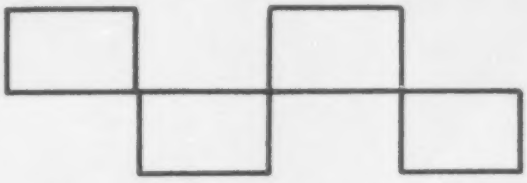


Fig. 7 Walking Forward on Staggered Mats

4. Name: Walking Forward on Footprints
   Equipment: Make footprints out of whatever materials are available.
   Description: Space footprints in desired pattern for the child to follow. Demonstrate, then have the child perform walking.

[1] H.D. Bud Fredericks, et al., *The Teaching Research Motor Development Scale: For Moderately and Severely Retarded Children*, p. 12

[2] *Ibid*, p. 13.

Teaching Hints:

- Chalk or white shoe polich can be used to diagram footprints.
- Letter footprints L for left foot and R for right foot.
- Have the child walk backwards.
- Change pattern: Example, semi-circle, circle, space footprints further apart, etc.
- Change footprints to stepping stones, bear tracks, etc.

5. Name: Walking Forward
   Equipment: Straight line(s) approximately one inch wide.
   Description: Have student walk forward on a straight line which is on the floor. The length of the line is predetermined by the teacher.
   Teaching Hints:
   - Use existing lines on gym floor.
   - Use *appropriate* tape, white shoe polish or chalk to construct lines if there are no existing lines on the floor.
   - If the child has difficulty with walking on one inch line, use a wider line.
   - Have the student walk backward along the line.
6. Name: Knee Walking
   Equipment: Small rubber pads.
   Description: Children assume knee position. Space rubber mats so that each child can walk on pads using knees.
   Teaching Hints:
   - Use different color pads.
   - Use R for right knee and L for left knee when needed.
   - Use child's imagination by traveling through woods, stepping stones over water, etc.
7. Name: Creeping with Handprints
   Equipment: Handprints made out of whatever material is accessible.
   Description: Have the child assume hands and knees position (creeping stance). Space handprints in desired pattern for child to follow.
   Teaching Hints:
   - Use imagination in laying out the pattern for children.
   - Construct path through simple obstacle course (e.g., a tunnel, low fence to go under, slight incline, slight decline, etc.)

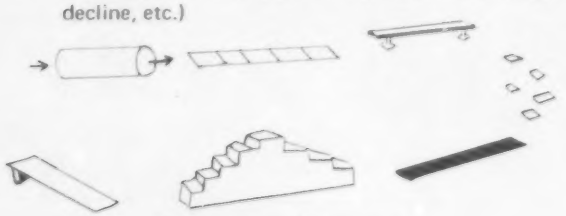


Fig. 8 Obstacle Course

8. Name: Directional Creeping
   Equipment: Mat
   Description: Child assumes hands and knees position (creeping stance) and follows directions of the teacher. Base directions on what the child understands and can perform.
   Teaching Hints:
   - Be safety conscious.
   - Make student(s) safety conscious.
9. Name: Bear Walk
   Equipment: Mat
   Description: Child assumes hands and knees position. Signal child to move like a bear. Have the child move right leg and right arm and then left leg and left arm. Walk slowly and stress to the child that he is a bear.
   Teaching Hints:
   - Use child's imagination, for example, walking through the woods.
10. Name: Creeping Backward and Sideward
    Equipment: Mat
    Description: Child assumes creeping position. Demonstrate how to move backward. Have the child move backward. Demonstrate how to move sidewards. Have the child move sidewards.
    Teaching Hints:
    - Observe and record homolateral and bilateral problems, i.e., coordinating the use of the extremities on the same side and opposite sides of the body.
11. Name: Creeping Through Obstacle Course.
    Description: Use tunnel (rolled up mat), slant board, stepping stones, winding path, circle path, etc. Child assumes and moves in a creeping position through the obstacle course.
    Teaching Hints:
    - Vary methods used, for example, creep forward, backward crawling, rolling, etc.
12. Name: Marching-in-Place
    Equipment: Record or musical instrument.
    Description: Explain and demonstrate how to march-in-place. Have the child respond as follows:
    - Stand up straight.
    - Lift left leg up, hip high, then place left leg on floor.
    - Lift right leg up, hip high, then place right leg on floor.
    - Up with the left leg and down with the left leg.
    - Up right leg on count of one and down on count of two.
    - Up left leg on count of three and down on count of four.

    Teaching Hints:
    - Use slow and fast cadence.
    - Have children run in place, then slow down.
    - Tell boys they are football players getting in shape.
    - Tell girls they are practicing cheerleading.

13. Name: Climbing Stairs
Equipment: Stairs, bench, gymnasium bleachers.
Description: Explain and demonstrate how to climb stairs. Have the child respond as follows:
- Stand up straight.
- Raise right arm and left leg, and plant left foot on landing of first stair.
- Raise left arm and right leg, and plant right leg on landing of second step.
- Continue until all stairs have been completed.
- Have the student climb down the stairs.

Teaching Hints:
- Stress the use of all four limbs.
- Have the child learn to pull up with arms and push with legs.
- Have the child climb in a straight line and keep his body in the direction of the climb.

14. Name: How Many Ways Can We Walk?
Equipment: None
Description: Arrange the children in any formation (e.g., circle, line, or at random). Caution children to avoid colliding with other children. Ask the children, "How many different ways can we walk?" Ask the children to:
- Walk anywhere in the gymnasium without touching anyone.
- Walk backward anywhere in the gymnasium without touching anyone.
- Walk as if you are happy.
- Walk as if you are sad.
- Walk very quietly.
- Walk as if you are carrying a big heavy box.
- Walk as if you are barefoot walking on hot sand.
- Walk as if you are barefoot and walking on pebbles.
- Walk up a steep hill.
- Walk on your toes.
- Walk moving your arms like a bird.
- Walk making yourself as big as you can.

Teaching Hints:
- Be safety conscious. Remind the children to be careful and watchful of others.
- Have children work in pairs, then in groups of varying ages.
- Have children think up other ways of walking.
- Devise additional walking variations.

15. Name: Ways to Skip
Equipment: Record or musical instrument.
Description: Arrange the class in the formation desired (i.e., circle, line, or random formation). Ask the children to:
- Skip around the room without touching anyone.
- Skip backwards.
- Skip sidewards.
- Skip as if you are carrying a large package.
- Skip quietly.
- Skip slowly.
- Skip with arms held tight to your side.

Teaching Hints:
- The same hints as suggested for No. 14. The activities suggested for walking and skipping are classified as movement exploration. Additional movement exploration ideas can be found by referring to Basic Movement Education for Children.[1]

16. Name: Mystery Object[2]
Equipment: Mystery Object – e.g., large stuffed animal, cardboard box, etc.
Description: Instruct student to get in crawling position on hands and knees. Have student search for mystery object. Some students may require a sound clue to locate object without frustration.
Teaching Hints:
- This activity works well with a group. See who can be first to locate the mystery object.

17. Name: Crawling, Auditory Sound
Equipment: Audi-locator, cassette tape recorder or transistor radio.
Description: Instruct student to get in crawling position on hands and knees. Have student crawl to source of sound. Student should move independently.
Teaching Hints:
- This activity works well with a group. See who can be first to locate sound.

Fig. 9 Crawling, Auditory Sound

Fig. 10 Knee Walking

[1]Bonnie L. Gilliom, *Basic Movement Education for Children – Rationale and Teaching Units*, Unit 3, pp. 133-180.

[2]Tasks 16-26 were developed by Maureen Murphy, St. Joseph's School for the Blind, Jersey City, N.J. (Permission to publish granted.)

18. Name: Knee Walking
Equipment: Gym mats
Description: Place two gym mats together lengthwise. Have student kneel on rug with back straight and head upright. Instruct student to walk on knees to end of mats.
Teaching Hints:
Motivation should be provided by placing a "surprise" at the end of the mat – a raisin, toy, or other object of value to the student. This activity may also be done in competition with another student – a knee walking race. Students should be orientated to the end of the mats through sound – e.g., audi-locator, bell, clapping, or teacher's voice.

19. Name: Cross Lateral Walking
Equipment: Strip of rug approximately 3 feet wide to cover length of auditorium.
Description: Instruct student to remove shoes and socks. With an adult on each side of student, instruct student to walk the length of the rug. Adults lightly hold wrists of student and coordinate swing of arms with leg movements. Left foot forward, right arm forward, etc.
Teaching Hints:
This activity is meant to enable the student to experience a free flowing movement pattern in a space which he can trust. After several practice sessions, encourage the student to walk the length of the rug independently while keeping up a steady rhythm. In addition to the rug, a student may be orientated to a sound at the end of the rug.

20. Name: Alternate Arm Swing
Equipment: None
Description: Student stands with back against wall. Arms should be hanging freely at sides, palms touching wall. Instructor stands facing the student. While holding the student's wrists, the instructor establishes the rhythm of alternately swing arms, saying "swing right – swing left" as arms swing forward. As arms swing back, palms should tap wall. When the student has become familiar with the activity, the instructor should establish the rhythm with verbal direction only.
Teaching Hints:
It is important that this activity be done in contact with the wall since it provides the necessary feedback of movement.

21. Name: Running With A Buddy
Equipment: None
Description: Each student is paired with an adult for a "partner race." Student should hold the hand or upper arm of the adult with whom he is paired. Partners are instructed to run towards the sound of the leader's hand clapping.
Teaching Hints:
This is a good group activity. By running with a sighted

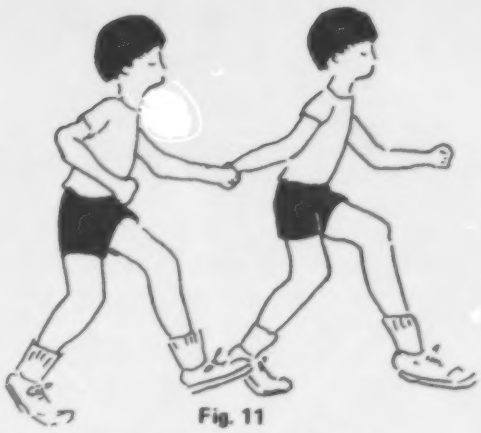


Fig. 11

adult the student is able to experience the speed and free flow of movement involved in "normal" running. The adult's movement assures the student that the environment is a safe one in which to run.

22. Name: Running, Auditory Cue
Equipment: Strip of rug stretching across width of auditorium.
Description: Instruct students to assemble at one end of the room. Leader stands at other end of room behind strip of rug and instructs students to run towards his/her voice until their feet touch the rug.
Teaching Hints:
This activity should follow the one of running with a partner. This is a good group activity – running race.

23. Name: Movement to Sound
Equipment: Percussion instrument to establish rhythm – e.g., drum, triangle, guitar.
Description: Have students listen to rhythms for walking, running, and jumping. At first, instructor should identify rhythm for student – e.g., "Listen to the walking music. Walk towards the music." Once the students can identify the movement to be made for each rhythm place rhythms in sequence – walking, running, jumping – in various combinations. Students should shift movement according to rhythm heard.
Teaching Hints:
This is a good group activity. Students may require verbal reinforcement to know what movement is required by each rhythm.

24. Name: Unilateral Movement
Equipment: None
Description: Student lies on back with arms at sides and feet together. Student is instructed to move one whole side – e.g., right leg and right arm.
Teaching Hints:
Student should be assisted in any way necessary in order that the correct response be made – e.g., programming the correct movement, providing tactual clues, and holding down opposite side. Two adults may be necessary for this activity.

Fig. 12

25. Name: Bilateral Movement
    Equipment: None
    Description: Student lies on back with arms at sides and feet together. Instructor holds feet of student and moves them apart and together establishing a rhythm and verbalizing, "out and in." After sufficient practice student performs activity independently to instructor's commands. Follow same procedure with arms, moving them until hands meet together over head. Finally combine arm and leg movements.

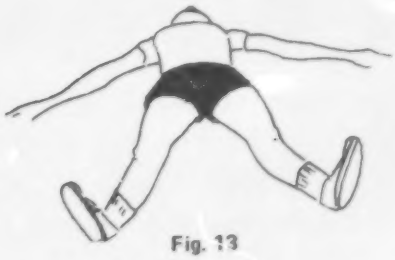


Fig. 13

26. Name: Cross Lateral Movement
    Equipment: None
    Description: Student lies on back with arms at sides and feet together. Student is instructed to move left leg and right arm. Student is instructed to move right leg and left arm.
    Teaching Hints:
    Student should be assisted in any way necessary in order that the correct response be made – e.g., programming the correct movement, providing tactile clues, and holding down limbs that are to remain stationary. Two adults may be necessary for this activity.

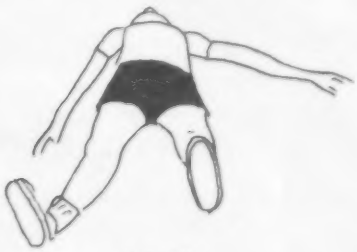


Fig. 14

BALANCE POSTURAL ORIENTATION

Balance is the ability of the child to sustain control of his body when using both sides simultaneously, individually, or alternately.

If a child has good balance, his body can act in an integrated manner, freeing his mind to concentrate on abstract matters.

Fig. 15 Balance – Two Feet – One Foot

1. Name: Line Stand
   Equipment: Line tape on floor.
   Description: Child stands on a line with feet apart and parallel. Stands on line, feet and heels together.
   Teaching Hints:
   - Foot positions may be drawn on floor with chalk.
2. Name: Seated Balance
   Equipment: Mat
   Description: Child sits legs out, arms resting on thighs. Student should be made to maintain seated balance for increasingly longer periods of time.
   Teaching Hints:
   - Teacher may help the student into balance position.
3. Name: Push Balance
   Equipment: Mat
   Description: Child in sitting position, hands resting on thighs. Gently push the child off balance in each direction. Child regains balance.
   Teaching Hints:
   - Stress shifting body weight to maintain control.
4. Name: Hands, Knees, and Toes Balance
   Equipment: Mat
   Description:
   - Hands – knees – toes touching mat (six point balance).[1]
   - 5-point balance by removing one hand.
   - Remove one hand and one knee (same side).
   - Remove one hand and one knee (opposite side).
   - Remove one hand, one knee, one toe (opposite side – same side).

[1] William T. Braley, *Daily Sensorimotor Training Activities*, p. 29.

Teaching Hints:

- Start with simple balance (6 point) and gradually make the task more complex by reducing the points of body contact.

Fig. 16 Six-Point Balance

5. Name: Heel-Toe-Balance
   Equipment: Tape or white shoe polish.
   Description: Child stands on a line with the toe of one foot touching the heel of the other foot.
   Teaching Hints:
   Start by using an imaginary line.

6. Name: Tip-Toe-Balance
   Equipment: Mat
   Description: From a standing position, the child raises up on toes. Repeat to see how long the child can maintain the balanced position.
   Teaching Hints:
   Child must have muscle strength to be able to hold balanced position.

7. Name: Step-Through Balance
   Equipment: Hula hoop
   Description: Child holds a hula hoop in front of him with both hands; steps one foot at a time into the hoop, and brings the hoop up and overhead.
   Teaching Hints:
   Initial attempts should be performed on a mat.

8. Name: Elephant Walk
   Equipment: Mats
   Description: Child bends forward from the waist, arms hang limply, hands clasped. Walks forward by taking large steps.
   Teaching Hints:
   - Place three or four mats in a line for a longer balance walk.

9. Name: Egyptian Balance
   Equipment: None
   Description: Child stands feet together, arms straight out, with palms touching. Raises one leg until parallel to floor. Holds position as long as possible.
   Teaching Hints:
   - Raised foot cannot touch opposite leg. Try first attempt with eyes open.
   - Stress body weight is to be shifted to support leg.
   - Stress balancing on right and left foot.

Fig. 17 Egyptian Balance

10. Name: Ladder Walks[1]
    Equipment: Ladder and mats
    Description: Lay ladder flat on floor.
    - Child walks forward with one foot on each side of the ladder.
    - Walks forward on right side of ladder.
    - Walks forward on left side of ladder.
    - Walks forward, stepping in the spaces between the rungs.

    Teaching Hints:
    - Instructor may have to help the child by holding his hand and walking him through activity.

11. Name: Jump and Turn
    Equipment: Mat
    Description: Child stands feet together, jumps up, and lands on both feet.[1]
    - Child jumps up and lands on one foot.
    - Jumps up and does one quarter turn, and lands on both feet.
    - Jumps up and does one half turn, and lands on both feet.

    Teaching Hints:
    - Instructor may hold hands of the child and jump with him.
    - Tape marks on floor will aid with one quarter and one half turns.

12. Name: One Foot Balance
    Equipment: Mat
    Description: Child stands on one foot. Holds position for five seconds. Vary tasks – eyes opened and eyes closed.
    Teaching Hints:
    - Change feet.
    - Use arms to help with balance.

13. Name: "V" Sit
    Equipment: Mat
    - Child sits on mat, raises hands and feet off mat, holding balance.

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[1]William T. Braley et al., *Daily Sensorimotor Activities*, p.40.

- Child sits on mat with legs raised and knees straight.
- Keeps arms straight out and pointed toward toes.
- Locates balance position and holds as long as possible.

Teaching Hints:

- Teacher may assist the child to find balanced position.

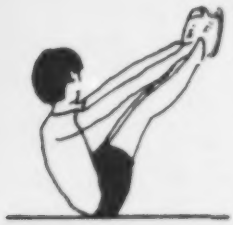


Fig. 18 "V" Sit

14. Name: "T" Balance
    Equipment: Mat
    Description: Child stands on one foot with other leg out behind. Bends forward from waist with arms out front. Holds position.
    Teaching Hints:
    - If too difficult to be accomplished on mat, try on gym floor, but be sure to have a spotter.
    - Stress balancing on right and left foot.

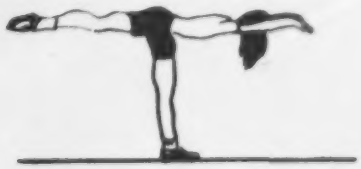


Fig. 19 "T" Balance

15. Name: Jump and Balance
    Equipment: Bench and mat
    Description: Child jumps from low bench and tries to maintain balance upon landing.
    - Jump and land in restricted area.

    Teaching Hints:
    - Teacher may hold the child's hand during the jump if necessary.

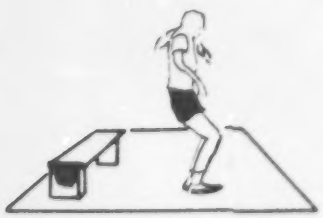


Fig. 20 Jump and Balance

16. Name: Cross-Over Walk
    Equipment: None
    Description:
    - Child stands and slides right foot to side, then slides left foot to right. Always keeps right foot leading. Child slides left foot to side, then slides right foot to left. Always keeps left foot leading.
    - Child crosses left foot in front of right and continues walking. Always bringing left foot in front.
    - Child crosses right foot in front of left and continues walking. Always keeping right foot in front.

    Teaching Hints:
    - Have the child perform the tasks with eyes open.
    - Increase the difficulty level by having the tasks performed with eyes closed.

Fig. 21 Cross-Over Walk

17. Name: Walking Activities Involving Balance
    Equipment: White shoe polish, balloons, plastic bowling pins, beanbags, and chalkboard erasers.
    Description: Put a series of circles down on the floor with white shoe polish and have the child walk through the row of circles putting his foot squarely in the middle of each circle. The circles should be about six inches in diameter.
    Tasks:

Fig. 22 Walk Through Circles

- Walk backward through the circles on your tip toes, keeping your arms out for balance and looking to see where you are going.
- Walk backward and place each foot squarely in the middle of each circle.
- Walk through the circles and at the same time keep batting a balloon in the air over your head.

- Walk through the circles with a beanbag on top of your head.
- Walk forward and backward through the circles on your tip toes with a beanbag on your head.
- Walk through the circles, stop and balance on one foot, and pick up an object that has been placed on one of the circles.
- Stand on one of the circles and perform a "T" balance.
- Stand on one circle and pick up an object, while performing a "T" balance.
- Stand on one circle and balance yourself on one foot, while touching your raised, outstretched leg with both hands.

Teaching Hints:

- Focus eyes on the task.
- Hold arms outstretched to maintain balance.
- Perform tasks slowly.
- Maintain proper body position at all times.

Fig. 23 Picking Up An Object

Fig. 24 Balance: Touch Leg

18. Name: Walking Activities on a Balance Beam
    Equipment: Balance beam, balloons, plastic bowling pins, chalkboard erasers, beanbags
    Description:
    - Walk across the balance beam.
    - Walk across the balance beam on your tip toes.
    - Walk backward across the balance beam.
    - Walk backward across the balance beam on your tip toes.
    - Walk across the balance beam and at the same time keep batting a balloon in the air over your head.
    - Walk backward across the balance beam and at the same time keep batting a balloon in the air over your head.
    - Walk forward and backward across the beam with your hands held behind your head.

Fig. 25 Balance Beam

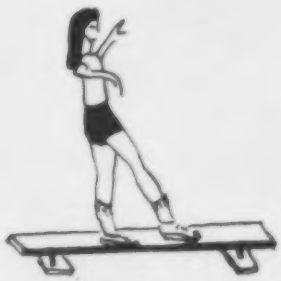


Fig. 26 Walking Activities on Balance Beam

- Walk to the middle of the balance beam, stand on one foot, reach over and pick up an object.
- Walk to the middle of the balance beam and pick up an object that is lying on the beam and walk backward to the end of the beam.
- Walk across the beam stepping over objects placed at various intervals on the beam.
- Walk across the beam with an object on your head.
- Walk backward across the beam with an object on your head.
- Stand on one leg in the middle of the balance beam with an object on your head for ten seconds.

Teaching Hints:

- Have the child walk slowly across the beam.
- Be ready to assist the child if he needs help.
- It is a good idea to have the students work in pairs – one performs the task while the other "spots."

19. Name: Balance Activities, Varying Body Positions
    Equipment: Mats, stall bench, white shoe polish, tires
    Description: The child performs the following tasks:
    - Four-point balance (i.e., four parts of the body in contact with four spots on the floor).
    - Three-point balance (e.g., tripod balance).
    - Two-point balance (e.g., squat hand balance, hand balance).
    - A cartwheel.

    Teaching Hints:
    - Preface the unit with strength-building activities.
    - Have all stunts performed, initially, on a mat.

Fig. 27 Tripod Balance

- Use "spotters" for the more difficult stunts.
- Stress maintenance of balanced positions for increasingly longer periods of time.
- Emphasize use of a wider base to stabilize the body. Four-, three-, and two-point balance activities: Add creativity by requesting the child devise varying combinations of contact points with spots on the floor.

Fig. 28 Squat Hand Balance

20. Name: Sitting Posture[1]
    Equipment: Chair and stool
    Description: Instruct student to assume correct posture in chair – student may need to be shown. Have student raise feet from floor until legs are level with the chair. Maintain this posture for approximately ten seconds. Follow same procedure while sitting on stool.
    Teaching Hints:
    This activity provides experience in maintaining balance and postural orientation under unusual circumstances.

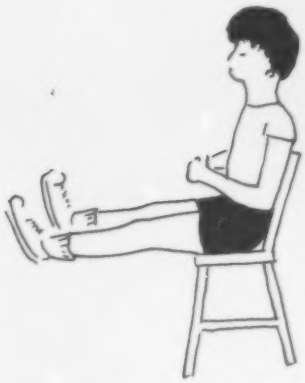


Fig. 29 Sitting Posture

21. Name: Sitting, Standing, Walking Posture
    Equipment: Book or bean bag
    Description: Place an object on the head of a student who is in a sitting position. Instruct him to hold still and see how long he can keep the object on his head. Proceed to standing and finally to walking.
    Teaching Hints:
    This activity works well with a group. Have students compete against each other. Students who may be fearful of the book dropping should use bean bags. Bean bags are easier to balance and should be used with students who experience difficulty with this activity.

Fig. 30 Sitting Posture with Object on Head

22. Name: Rhythmical Swinging
    Equipment: None
    Description: Students stand facing a partner with arms slightly extended. Holding the hands of their partner, they swing their arms from side to side.
    Teaching Hints:
    Swinging should be done in rhythm. A simple song will help to maintain the rhythm established. Feet should be spread slightly (approximately 6 inches) to provide better balance.

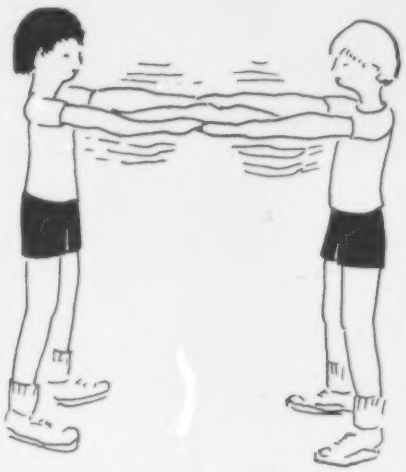


Fig. 31 Rhythmical Swinging

23. Name: Wall Exercising
    Equipment: None
    Description: Child stands with back touching wall. Instructor recites the following poem, and when necessary, helps the student to perform the action.

[1] Tasks 20-31 were devised by Maureen Murphy, St. Joseph's School for the Blind, Jersey City, N.J. (Permission to publish granted.)

We stretch to the ceiling (hands upwards)
And reach out to the wall (arms reach out from sides)
We bend to touch our knees and toes (knees straight)
Then stand up straight and tall. (arms at sides, head up)

Teaching Hints:

Feedback is provided through contact with the wall. Other stretching exercises may be used to develop posture and balance.

Fig. 32 Wall Exercising

24. Name: Rug Walking

Equipment: Strip of rug – length of auditorium

Description: Students should remove shoes and socks. Instruct students to walk on edge of rug – heel to toe.

Teaching Hints:

The edge of the rug can be used for activities similar to those suggested for use on the balance beam – with the element of fear eliminated.

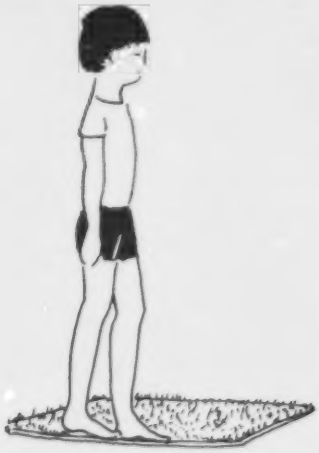


Fig. 33 Rug Walking

25. Name: Walking Barefooted

Equipment: Walking boards of graduated widths – 2" x 8", 2" x 6", and 2" x 4" – eight – twelve feet long to be held in brackets 2 inches above floor.

Description: Child should be instructed to feel the texture, width and length of the board. If the board is raised, he should "feel" the space between the floor and the board. In order to provide greater tactile feedback, shoes and socks should be removed. Proceed from wide to narrow, first on floor and then raised. Child should be instructed to walk forward (heel to toe), backward (toe to heel), and to the side, in that sequence.

Teaching Hints:

If a child experiences difficulty maintaining balance or is fearful, the instructor should assist.

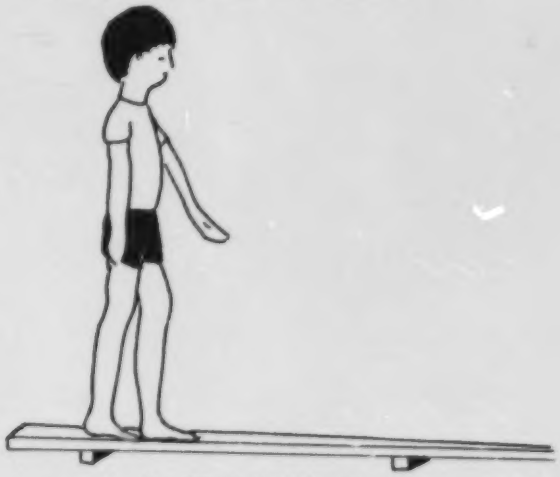


Fig. 34 Walking Barefooted

26. Name: Statues

Equipment: Record player

Description: Tell students that they are going to play a game called, "Statues." Explain meaning of word. Instruct students to move in unusual positions to the music. Various possibilities should be shown them by putting them through the motions. When music stops, students are to become "statues" and maintain position for approximately ten seconds.

Teaching Hints:

This activity works well with a group. Any appropriate music may be used.

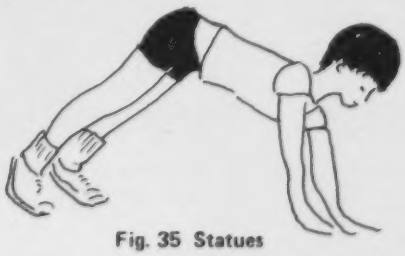


Fig. 35 Statues

27. Name: Animals in a Zoo
Equipment: Record player – "Animals in the Zoo" record.[1]
Description: Have students listen to and follow instruction on record. Students should be helped in assuming correct positions.
Teaching Hints:
This is a very enjoyable activity which works well with a group. Freedom of expression should be encouraged by the instructor.

28. Name: Loss of Balance
Equipment: Gym mats
Description: Present this activity as a lesson in safety. Discuss prevention of falls and what happens when people do fall. Teach child to brace his fall and protect his head by extending his arms to floor if falling in a forward position. If falling backwards, teach student to fall on lower half of body, and again to use his arms and hands for protection.
Teaching Hints:
Put a child through motions of falling showing him how to protect himself. Have child practice on gym mat. This activity provides very practical experience and the response of the students has been positive. All safety precautions should be taken to prevent a child from getting hurt during this activity.

Fig. 36 Safety Tasks

29. Name: Bunny Hop
Equipment: Record player – "Bunny-hop" record.
Description: Students should listen to song and be instructed to jump or hop (if they are able) at appropriate places throughout the song.
Teaching Hints:
Students should first be instructed to jump in place. If they are able to jump in place, they should be taught to jump forward by holding hand or upper arm of adult who performs action. A rug may be placed 6-12 inches away from the student to provide feedback of having jumped forward onto the rug. Backward jump should be taught in the same way. Students who are learning to hop should hold onto the back of a chair for balance until they are able to hop independently.

30. Name: Jumping From A Height
Equipment: Large wooden blocks or platform approximately six inches high.
Description: Instruct student to feel the distance from the block to the floor. Instruct student to stand on the block and to jump off while holding the instructor's hands. After sufficient practice, encourage the student to jump independently.
Teaching Hints:
As the student becomes more confident, height should be increased up to twelve inches. Feet should remain in landing position after jumping.

31. Name: Balance on One Foot
Equipment: Parallel bars or chair
Description: Instruct student to hold onto parallel bars or back of chair and raise right foot. Tell student to try to keep foot raised while you count to 15 – approximately 15 seconds. Provide positive reinforcement for effort and success. Follow same procedure with left foot.
Teaching Hints:
As student's skill increases, (when he can keep his foot raised for 15 seconds while holding), have him attempt task without holding.

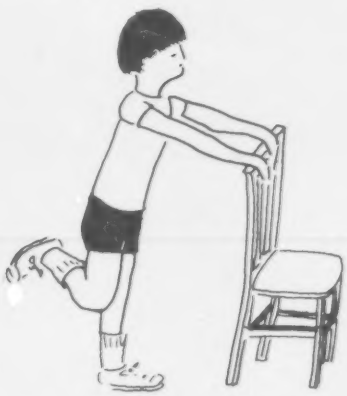


Fig. 37 One-Foot Balance

EYE-HAND COORDINATION

Eye and hand coordination involves the integration of both body parts so that the eyes visually steer the hands through space to accomplish a given task. Almost all tasks and activities may be found in one, or a combination of, three categories, that are presented here.

These categories of eye and hand coordination are throwing, catching and striking. The tasks and activities described here provide experience in each of the three

[1] Play and Learn – Games and Dances Set, P.O. Box 415, Highland Park, Illinois.

categories. The activities selected should be based on the needs of the individual student as determined by the objective and subjective assessment.

1. Name: Leadup for Throwing[1]
   Equipment: One whiffleball on a string per two students, or ball hanging from string on a fixed structure.
   Description:
   - One partner holds a string with a softball size whiffleball at approximate eye level of his partner. Active partner stands in astride position facing the ball – with his throwing shoulder lined up with the ball.
   - (For right handed thrower) right leg is back – right arm prepared to throw.
   - Left leg is forward – left arm is raised forward in horizontal position pointing to the ball.
   - Student hits stationary ball with right hand.
   - Student hits ball with right hand and flings left arm to the rear.
   - Student hits ball with right hand and steps with left foot (simultaneously) as left arm is flung rearward.

   Teaching Hints:
   - Stress development of the total bilateral competency via throwing right and left-handed.

2. Name: Playing with Balloons
   Equipment: One balloon per student.
   Description:
   - Throw balloon in the air (underhanded) and catch it upon return.
   - Repeat task while throwing and catching with the right and left hand.
   - Attempt to keep the balloon in the air by tapping it with one or two hands.
   - Tap the balloon in the air and call out the name of another student who must tap the balloon.[2]
   - Tap the balloon against a wall.

   Teaching Hints:
   - "Control" the balloon by gently tapping rather than striking.
   - Keep eyes on the balloon at all times.
   - Devote equal time to developing the use of the right and left hand.

Fig. 1 Playing with Balloons

3. Name: Tapping and Catching A Whiffleball (Partners)
   Equipment: One whiffleball (softball size) on a string for every two students (string approximately 12" - 18" long).
   Description: A whiffleball is suspended between two partners (approximately midchest level).
   - Pass the ball back and forth and catch with two hands, one hand, and alternate hands.
   - Tap the ball back and forth with right hand, left hand, and alternate hands.

   Teaching Hints:
   - Use woolen ball.
   - Vary arc of the ball to increase difficulty of catching and striking.
   - Relax as you catch the ball.
   - Develop use of both hands.

Fig. 2 Catching Whiffleball

4. Name: Tapping Whiffleball (Swing or Push Style)[3]
   Equipment: One whiffleball for every two students. One rod (wand, dowel, etc.)
   Description: Partners stand scattered (facing each other). One partner holds the whiffleball on a string while the other partner holds a rod, wand, etc. The rod is held with one hand at each end.

[1] Developed by Lawrence A. Guarino, Physical Education Teacher, Chancellor School, Newark, N.J.

[2] William T. Braley et al., *Daily Sensorimotor Training Activities*, p. 94.

[3] Gerald N. Getman, *Pathway Program 1, Eye-Hand Coordination*, pp. 11-25.

- Partner swings ball toward hitter who strikes ball with the center of the rod by using a pushing motion.
- Partner swings ball and hitter strikes ball on rod near his right hand.
- Hitter strikes ball with rod near left hand.
- Hitter continues to strike ball alternating right, left, or center of the rod.
- Hitter taps ball, holding the rod in a diagonal position with left hand up and right hand down.
- Hitter keeps this position and hits with left, center and right section of the rod.
- Hitter changes position so that right hand is up and left hand is down (in opposite diagonal position).
- Hitter strikes ball with right, center, and left portions of the rod.
- Hitter holds rod in a vertical position with the left hand on top and right hand on the bottom.
- Hitter strikes ball with top, center, bottom of rod.
- Hitter reverses position of the hands (i.e., right hand in top position).
- Hitter strikes ball with top, center and bottom of the rod.

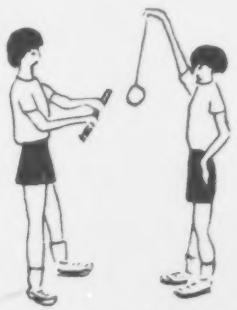


Fig. 3 Tapping Whiffleball

5. Name: Batting Whiffleball (Baseball Style)
   Equipment: One paddle. One bat and whiffleball on a string for every two students. One plastic bat or wand, dowel, etc.
   Description: Partners facing each other (standing). One partner holds a whiffleball on 12" - 18" string. The other partner holds a paddle (bat, wand, etc.) with two hands, then left and right hand.
   - Partner swings ball towards the other partner who strikes the ball with the bat held vertically.
   - Hitter strikes the ball, holding bat horizontal to floor.
   - Hitter strikes swinging ball with right hand, left hand (using vertical swing and horizontal swing).
   - Partner with bat now stands sideways to swinger.
   - Hitter strikes ball with near hand (backhand).
   - Batter hits ball with far hand (using horizontal swing).
   - Batter hits ball using both hands, holding bat baseball style.
   - As batter becomes more proficient he hits ball baseball style with extended arms.

   Teaching Hints:
   - Use large ball at first, then gradually smaller ones.
   - Paddles or large surface striking implements should be utilized first. Also should be light for quicker swing.
   - As batter improves use thinner implement.

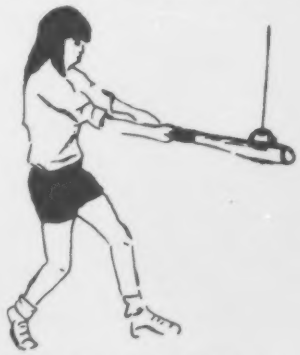


Fig. 4 Batting Whiffleball

6. Name: Batting[1]
   Equipment: One bat per each group of students. One large ball, one medium size and one small size. One batting "T" or traffic cone.
   Description: One student at bat, others scattered to retrieve balls.
   - Using a regular batting stance, student hits stationary ball on ground in front of him.
   - Child hits ball off of a batting "T."
   - Child bats a ball that is bounced to him.
   - Child hits a large ball pitched to him (no bounce).

   Teaching Hints:
   Sequence the four tasks as follows:
   - Bat with large hitting surface to bat with small hitting surface.
   - Large ball to small ball.
   - Stationary ball, slow rolling ball, bouncing ball to pitched ball (no bounce).

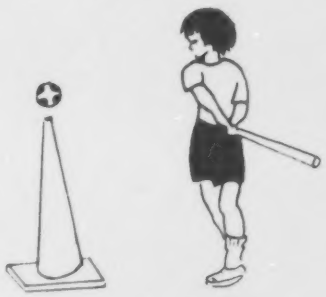


Fig. 5 Batting "T" Practice

[1] Bryant J. Cratty, *Motor Activity and the Education of Retardates*, pp. 147-8.

7. Name: Serving
   Equipment: One ball per student; one paddle per student; one balloon per student.
   Description: Stand facing the wall (5-10 feet); the distance from wall will vary with age and size of student. (Description is for a right-handed person.)
   - With an underhand swing, hit balloon (ball) towards the wall (with your right hand, palm open, first – then with fist – palm facing wall.)
   - Repeat taking a step forward with your left (front) foot.
   - Using a paddle, repeat the underhand serve (palm forward.)
   - Hit balloon (ball) with overhand stroke (serve) towards wall.
   - Repeat overhand stroke with body (legs) in astride position.
   - Throw ball in the air with an underhand toss and tap it towards the wall with both hands palms facing upward.

   Teaching Hints:
   - Use balloons or whiffleballs for beginners and very young students.
   - Use large size balls first, then reduce size.
   - Use light paddles if possible.

Fig. 6 Underhand

Fig. 7 Overhand

Fig. 8 Two Hands

8. Name: Ball Rolling
   Equipment: One ball for each student.
   Description: Straddle-sitting position.
   - Roll the ball to the left side, to the right side using both hands as a guide.
   - Roll the ball towards your left leg, and stop it with your left hand.
   - Repeat to the right side.
   - Roll the ball back and forth (side to side) pushing with one hand and stopping it with the other.
   - Roll the ball towards you, using both hands.
   - Roll it away from you, using two hands.
   - Roll it towards you, using one hand.
   - Roll it away from you, using the other hand.
   - Roll the ball towards you, and then away from you, using the right and left hand.

   Teaching Hints:
   - Stress keeping eyes on the ball at all times.
   - Progress from moving the head and eyes to follow the ball to keeping the head motionless while following the ball.
   - Use yarn ball, fluff ball, or styrofoam ball.

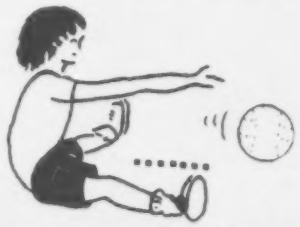


Fig. 9 Ball Rolling, Straddle-Sitting Position

9. Name: Ball Rolling (Pushing)[1]
   Equipment: One ball per student.
   Description:
   - Sitting, tuck position: Roll the ball around your body, roll the ball in and out of your legs.
   - Kneeling: Roll the ball around you in a circle, first to the left, then to the right.
   - Roll the ball in between your legs and around you.
   - Roll the ball to a line and trap it with your hands.
   - Roll the ball in and out of a row of bowling pins or any obstacle course (using one hand).
   - Roll the ball at a target using one hand (bowling pin).
   - Roll the ball and try to hit a target on the wall (using one hand).
   - Roll the ball and try to push it so it rolls into a target (e.g., wastepaper basket).

   Teaching Hints:
   - Stress pushing the ball slowly to maintain control.
   - Emphasize use of right and left hand.

10. Name: Rolling and Trapping Balls
    Equipment: One ball per student.
    Description: Children standing in a line an arms distance apart. A line parallel to the children, 10-15 feet away.
    - Roll the ball slowly – walk quickly after it and pick it up.
    - Roll the ball faster – run (or trot) after it and pick it up.
    - Roll the ball towards the line – run to the line and trap it.
    - Roll the ball towards the line – run to the line and pick it up.

[1] Marx, Erich, *The Ball Primary Book for Schools and Clubs*, p.13.

- Roll the ball toward the line – run to the line, turn your back to the ball and pick up the ball as it passes under your legs.
- Roll ball through an obstacle course, then hit target (or stop it).
- Repeat the same activities, but use a paddle, or hockey stick to propel and stop the ball.

Teaching Hints:

- Stress control and accuracy rather than speed.
- Emphasize "eyes on ball" at all times.

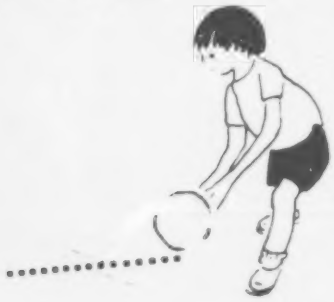


Fig. 10 Trapping A Rolling Ball

11. Name: Ball Bouncing[1]
    Equipment: One ball for each student.
    Description: Straddle-sitting position.
    - Hold ball head high – bounce and catch.
    - Bounce the ball, catch two times, three, etc.
    - Bounce and catch as many times as you can.
    - Bounce the ball, catch it high and low.
    - Bounce the ball and clap your hands before you catch it.
    - Bounce the ball. See how many times you can clap your hands before you catch it.
    - Bounce the ball and clap hands on thighs before catching it.
    - Throw the ball up (overhead) let it bounce, catch it.
    - Throw the ball up again. See how many times you can clap your hands (allowing it to bounce) before you catch it.
    - Throw the ball up again. See how many times you can clap your hands before you catch the ball (no bounce).

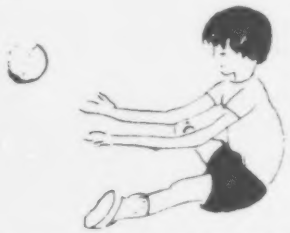


Fig. 11 Ball Bouncing Straddle-Sitting Position

[1]Michael J. Hardistry, *Education Through the Games Experience*, p.28.

Teaching Hints:

- Use bright colored ball (visual stimulus).
- Use balls with bells or other objects in center (auditory).
- Use balls of various sizes and textures (tactile).
- Use music or other rhythmic device to keep time with the bouncing.
- Have the children devise other ball-bouncing activities.

12. Name: Ball Bouncing (Dribbling)
    Equipment: One ball for each student.
    Description: Standing position.
    - Bounce (dribble) the ball with the left hand, the right hand.
    - Bounce the ball with alternate hands.
    - Dribble the ball high and low (right, left, alternate hands).
    - Dribble the ball and walk forward, backward, sideways, etc.
    - Dribble the ball high and low as you move around.
    - Dribble the ball through an obstacle course.
    - Dribble the ball, following a straight line or a circle.
    - Dribble the ball and hop, skip, etc.
    - Dribble the ball on your right side, left side.
    - Dribble the ball around you, first to the left, then to the right.
    - Dribble the ball in between your legs and around you.

    Teaching Hints:
    - Stress pushing rather than batting the ball.
    - Emphasize use of both hands.

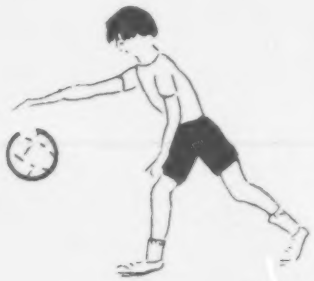


Fig. 12 Bouncing Ball

13. Name: Partners Catching
    Equipment: One ball for every two students.
    Description: Partners straddle-sitting, facing each other (feet touching).
    - Hand the ball to your partner – now return – repeat several times keeping eye on the ball (two hands).
    - Move away from each other (a little) and again hand the ball back and forth (using two hands).
    - Roll the ball back and forth to each other (two hands).

- Trap the ball before you push it back to your partner.
- Roll the ball with one hand – partner traps it with two hands.
- Roll the ball with the other hand.
- Roll the ball slowly at first, gradually increase speed.
- Push the ball back and forth without stopping it.
- Using two hands, throw the ball on one bounce to your partner.
- Using two hands, throw the ball to your partner without a bounce (underhand or push pass).
- Repeat ab ove tasks from the kneeling and standing positions.

Teaching Hints:

- Use large balls initially.
- Use multi-color balls.
- Use yarn or fluff ball for all the above except bouncing.

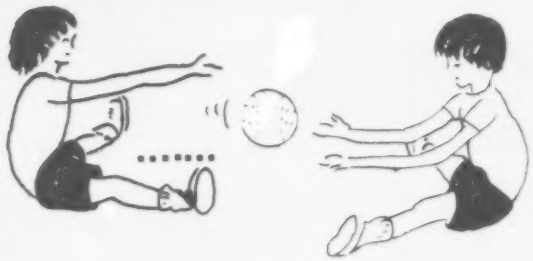


Fig. 13 Partners Catching

14. Name: Beanbag Activities[1]
    Equipment: One beanbag per child.
    Description: Straddle-sitting position.
    - Hold the beanbag in both hands, the left hand, the right hand.
    - Hold it on the back of one hand, the other.
    - Toss it in the air and catch it.
    - Toss it in the air and clap your hands before you catch it.
    - Throw and catch it with one hand, the other hand.
    - Balance the beanbag on your head, elbow, wrist.
    - Balance it on other parts of the body.
    - Balance the beanbag on your elbow, and toss it up, and catch it. Try the other elbow.
    - Throw it up with your hand, but catch it on the back of your head. Try it with the other hand.
    - Throw it up in the air with your hand and try to catch it on your elbow.
    - Try to catch it on your shoulder.

    Teaching Hints:

    - Use beanbags of different colors.
    - Use vinyl beanbags for easy cleaning.
    - Use different shaped beanbags.
    - Make your own beanbags.

15. Name: Beanbag Juggling
    Equipment: One beanbag per student, later two for each student.
    Description: Standing, scattered position.
    - Balance the beanbag on different parts of your body.
    - Walk with the beanbag on your wrist, shoulder, elbow, head, etc.
    - With the beanbag on your head and/or on your shoulder(s) walk in a low position.
    - Throw the beanbag in the air and catch it with two hands.
    - Try catching it with one hand.
    - Catch it low to the ground. Catch it high.
    - Clap your hands before you catch it.
    - Catch it with your wrist, elbow, shoulder.
    - Hold a beanbag in each hand; throw them in the air and catch them.
    - Catch them on the back of your hands.
    - Start with a beanbag in each hand. Throw the beanbag in the air with the left hand. Prior to catching the bag with the right hand, release the beanbag from the right hand to the left hand. After the skill is mastered, juggle back and forth.

    Teaching Hints:

    - Refer to No. 14.

Fig. 14 Beanbag Activities

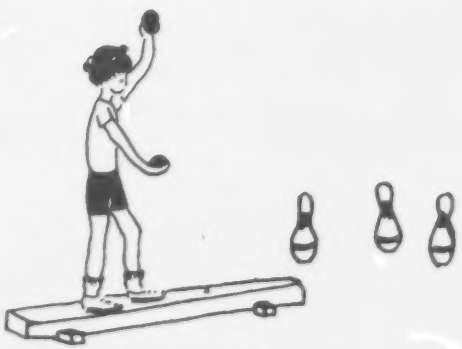


Fig. 15 Beanbag Juggling

[1] Layne C. Hackett, *Movement Exploration and Games for the Mentally Retarded*, p. 87.

16. Name: Newcomb–Volleyball[1]
Equipment: One ball per group, one volleyball net on standards, or rope tied to two posts.
Description: Partners or groups evenly distributed on each side of net.
- Using two hands, throw the ball over the net to your partner. Partner catches it and throws it back (two hands).
- Using two hands, tap the ball over the net. Continue.
- Partner taps the ball in the air twice and then taps to teammate. Continue, increasing the number of taps before passing.
- Partners tap the ball back and forth over the net (immediately upon receipt).

Teaching Hints:
- Use plastic or soft rubber ball to avoid injury.
- Use multi-colored balls.
- Have children devise other variations.

Fig. 16 Two-Hand Overhead Tap

17. Name: Patty Cake
Equipment: None
Description: Partners facing each other.
- Clap your hands together.
- Clap your partner's hands (right to left and left to right).
- Clap your hands.
- Clap your right hand to your partner's left hand.
- Clap your hands.
- Clap your left hand to your partner's right hand.
- Clap your hands together.
- Clap your right hand to your partner's right hand.
- Clap your hands.
- Clap your left hand to your partner's left hand.
- Clap your hands.

Teaching Hints:
- Repeat, clapping hands twice.
- Make pattern more complex by including the tapping of thighs.

[1] Latchaw, Marjorie and Glen Egstrom, *Human Movement*, pp. 302-303.

EYE-HAND ACCURACY

Eye and hand accuracy is directly related to eye and hand coordination. It involves throwing objects at a target, striking (or hitting) objects at a target, and throwing an object by using a tool such as a stick, or scoop. Attempting to knock milk bottles from a table, attempting to throw a ball into a goal as in team handball, and shooting at a basket, are examples of the first category (throwing at a target). Putting as in golf, hitting a hockey puck at a goal, or a forehand stroke in tennis are examples of the second category (hitting an object towards a target). An unusual combination of both categories (throwing, and striking at a target with an implement) occurs in the game of lacrosse when a player throws the ball with a lacrosse stick.

The following tasks and activities provide a number of experiences in the first two categories, throwing an object at a target, and hitting an object at a target with an implement (i.e., bat, paddle, stick, etc.).

1. Name: Throwing for Accuracy
Equipment: Target (2' square) and, or line on wall five feet from floor: throwing lines on floor 3', 5', 8', 10'. One ball for each student. Large balls for two-handed throwing, smaller balls for one-handed toss. Students standing at least five inches apart from each other (side by side).
Description: Line formation parallel to wall surface.
- Throw the ball against the wall above the line and pick it up after it bounces on the floor.
- Throw the ball against the wall and catch it after hitting the wall but *before* it touches the ground.
- Throw the ball at the target and pick it up after it bounces, then repeat and catch it on the fly.
- Gradually, increase the distance from the wall.
- Change to smaller balls and use one hand throw.
- Now have pupils form lines one behind the other.
- Use two hands overhead, for overhead pass. First student throws the ball against the wall and moves to the end of the line as the next student catches it after it bounces.
- Repeat with student catching it before it bounces (student may have to get closer to the wall and, or throw the ball higher).
- Repeat activity using smaller ball and one-handed throw.

Teaching Hints:
- Teacher could use point system for every successful attempt at hitting target.
- Vary throwing level (e.g., two hands in front of the face for the chest pass).

2. Name: Ring Toss
Equipment: Rubber rings and dowels that stand upright.
Description:

- Students throw rings at wooden dowels.
- Task No. 1: Students perform as individuals.
- Task No. 2: Pair students and perform competitively.

Teaching Hints:

- Vary distance of dowels in accordance with individual abilities.
- Stress: smooth flowing toss – not power, eyes constantly on the target. Bilateral throwing: step with left foot and toss with right hand, or step with right foot and toss with left hand.

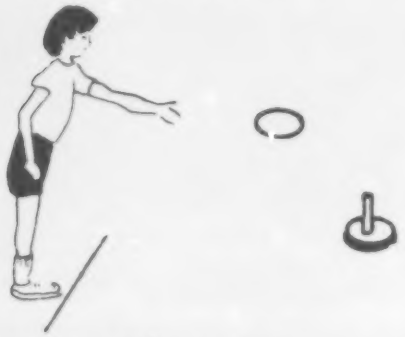


Fig. 1 Ring Toss

3. Name: Rubber Horseshoes
   Equipment: Rubber horseshoes and dowels that stand upright.
   Description:
   - Perform the same as description No. 2 above.

   Teaching Hints:
   - Refer to No. 2 above.

4. Name: Partners and Targets[1]
   Equipment: Hoops, ropes, beanbags, or lines on the floor. One ball for every two students.
   Description: Partners facing each other with a target between them on the floor.

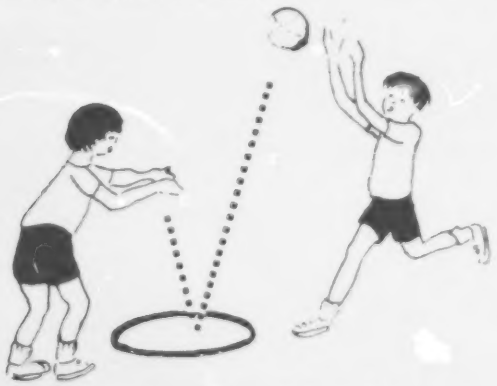


Fig. 2 Partners Throw Ball at a Target

- One partner (A) throws a ball at the target (with two hands).
- Other partner (B) catches the ball after it bounces.
- Other partner (B) throws the ball at the target and partner (A) catches it.
- Repeat using smaller ball, throwing with one hand.

Teaching Hints:

- Have points scored every time student hits the target.

5. Name: Group and Team Games.[2] Throwing at a Target Ball
   Equipment: One large ball (or movable target); one small ball per student.
   Description: Two teams approximately ten feet apart with team members standing side by side facing the other team. A ball is placed on the floor halfway between each team.
   - Pupils throw their balls at the larger ball.
   - Objective is to hit the ball so that it rolls to the other team.
   - Students retrieve balls thrown by the other team.
   - Repeat throwing until large ball rolls on, or beyond, either team line.

   Teaching Hints:
   - Score points for every hit.
   - Have another pupil or teacher roll the large ball laterally.
   - Students try to hit moving target.

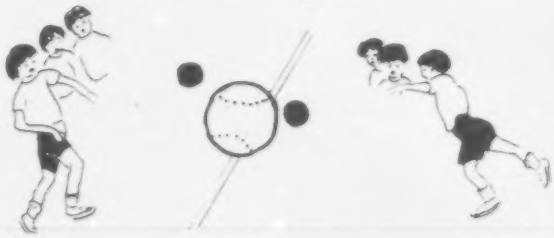


Fig. 3 Teams Throwing at a Moving Target

6. Name: Groups and Target[3]
   Equipment: One hoop for every three students. One ball for every three students.
   Description: Students standing three in a line with student in middle holding a hoop in front of him.
   - One of the outside students throws the ball through the hoop.
   - The other outside student catches ball on the bounce.
   - He throws the ball through the hoop.
   - Middle student holds the hoop at various heights.
   - Students can use overhand and underhand throw.

[1] Marx, Erich, *The Ball Primary Book for Schools and Clubs*, p. 25.

[2] Marx, Erich, *The Ball Primary Book for Schools and Clubs*, p. 28.

[3] Marx, Erich, *The Ball Primary Book for Schools and Clubs*, p. 30.

Teaching Hints:

- Vary size of the ball and hoop.
- Use beanbags and other throwing objects.
- Award points when ball passes through hoop.

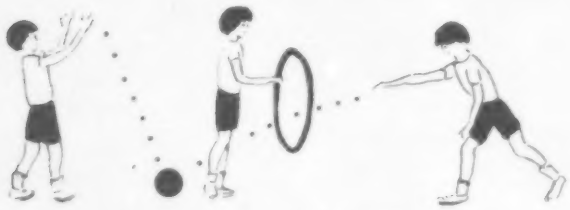


Fig. 4 Throwing Through A Hoop

7. Name: Grid-Tossing Game[1]

Equipment: One beanbag per student; one hoop per group; paperbasket, or floor grid for target.

Description: Individuals scattered or grouped in a circle with hoop in center. Groups in line side by side facing hoop.

Hoops and Grids:

- Student stands near hoop and throws beanbag in hoop.
- Student moves back a few steps and repeats.
- Student should use both overhand and underhand toss.
- Student should use shot-put basketball type throw.

Baskets:

- Repeat the above with a basket instead of a hoop.
- Student moves back gradually
- Use large baskets at first with small balls.
- Use smaller size baskets with larger balls.
- Raise targets (baskets) to various heights to approximate height of pupils.

Teaching Hints:

- Have students use two hands when throwing
- Have students use one hand.
- Vary by having students toss beanbags at specific numerals on floor grids.

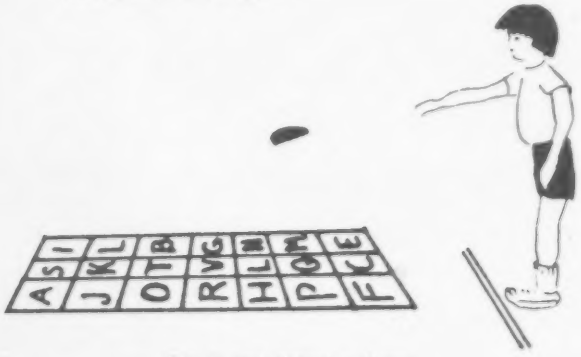


Fig. 5 Grid-Tossing Game

[1]Bryant J. Cratty, *Active Learning*, p. 99.

8. Name: Throwing at Targets[2]

Equipment: One beanbag or ball per student; one target (clown with holes for mouth, eyes and nose).

Description: Scattered, or on a line side by side facing target.

- Throw beanbag at large holes, then smaller holes.
- Move back and try to throw beanbag into openings.
- Use various throws underhanded, overhand, sidearm, shotput, basketball type.
- Have students devise their own way to throw at the target.

Teaching Hints:

- Use balls after the beanbags.
- Use other types of throwing objects: fluffballs; whiffleballs; etc.

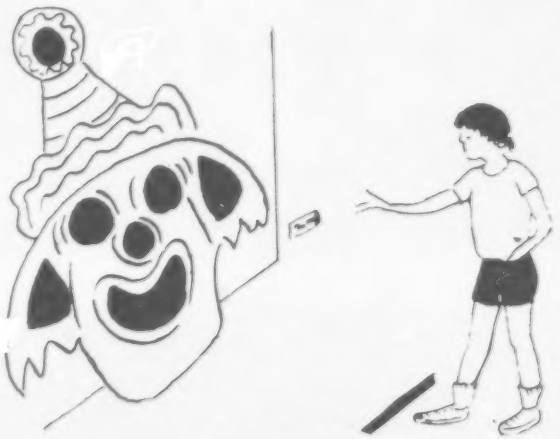


Fig. 6 Clown Target Face

9. Name: Hitting for Accuracy

Equipment: One ball per student, one bat (or similar tool) per student. One target cone, beanbags, etc.

Description:

- With ball on floor, student hits ball at target using baseball or golf swing.
- Student uses one hand swing first, then two hands.
- Student attempts to hit ball into a target (three or four beanbags forming a circle or square), or opening of traffic cone.
- Raise ball off floor (use small traffic cone) and repeat above tasks.

Teaching Hints:

- Use different size balls.
- Use balls of varying weights.
- Use different type hitting sticks.

[2]Marx, Erich, *The Ball Primary Book for Schools and Clubs*, p. 36

10. Name: Hitting for Accuracy Using Circle Games[1]
Equipment: One to three balls per group of students.
Description: Students straddle-sitting in a circle with feet touching. Students straddle-standing in a circle, feet touching.
Sitting:
- Six to eight students in a circle.
- Place one, two, or three balls in the circle. Start with one.
- Students attempt to hit the balls so they touch the legs of the other students.
- Students try to keep the balls from hitting their legs.

Standing:
- Six to eight students standing in a circle.
- Place one to three balls in the circle.
- Students attempt to hit the balls so they go through the legs of other students.
- Students attempt to keep the ball from going through their legs.

Teaching Hints:
- Vary by having students kneel, or squat in a circle.
- Begin the activity with one ball, then two, and three.
- Use large balls first, then smaller ones.

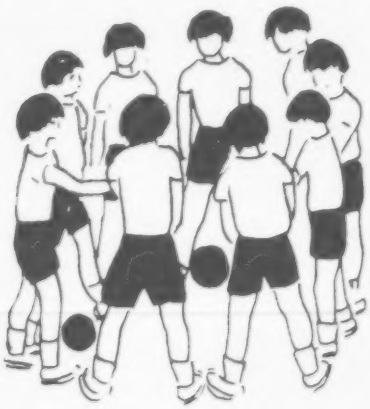


Fig. 7 Circle Game

EYE-FOOT ACCURACY

Eye and foot accuracy involves the integration of both body parts so that the eyes visually steer each foot through space to strike given objects. The main areas involved in this activity are striking (kicking) with the foot and hitting a predetermined area or target. The tasks and activities in this section provide a sequential approach to strengthening the integrated response.

[1]Marx, Erich, *The Ball Primary Book for Schools and Clubs*, p. 35

1. Name: Spot Walking
Equipment: White shoe polish, rubber rings, playground balls.
Description: Lay down a series of "spots" on the floor with tape or shoe polish. Have the child walk on the spots making sure they step on each one.
Teaching Hints:
- Demonstrate how you want it done.
- Walk the child through the spots emphasizing that he must touch each one.
- Have the child walk on his toes.

2. Name: Wall Spot Touching
Equipment: Tape or white shoe polish.
Description: Put a row of three spots on the wall six inches apart. The height of the spots should be about three feet, or whatever is appropriate for the child.
- Have the child lie on his back and hold his leg up in the air so that his foot is about six inches away from the middle spot on the wall.
- On command have the child alternately touch the left, middle and right spots on the wall.

Teaching Hints:
- Have the child touch the spots with his toes.
- Have the child touch the spots with his heels.
- Have the child use both feet.

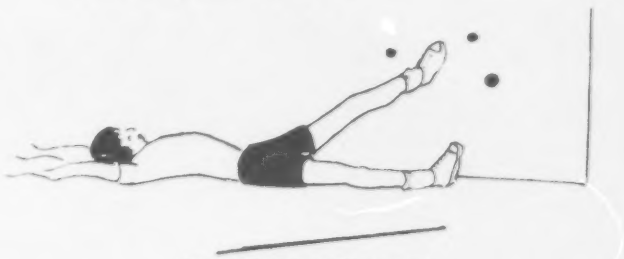


Fig. 1 Wall Spot Touching

3. Name: Spot Kicking
Equipment: Shoe polish or tape.
Description: Child stands facing the wall.
- Put a spot on the wall with either shoe polish or tape.
- The spot should be about four inches up from the floor.
- Have the child stand where he is most comfortable and kick the spot with the right foot and left foot.

Teaching Hints:
- Initially emphasis should be placed on striking the spot with any part of the front of the foot. Then have the child strike the spot with toe, instep, inside of foot and outside of foot.
- Proper balance while kicking should also be noted by the teacher.

4. Name: Ball Kick Off Tee
Equipment: Playground ball and rubber ring.
Description: Child stands with ball in front of him.

- Put playground ball on a rubber ring.
- The student kicks the ball off the tee (right and left foot).

Teaching Hints:

- Proper kicking form should be emphasized.
- Put a spot on the ball and have the student kick the spot on the ball (no target area involved).

Fig. 2 Ball Kick Off Tee

5. Name: Ball Kick to Wall
   Equipment: Playground ball, rubber ring, shoe polish or tape.
   Description.
   - Student, executing proper kicking technique, kicks a playground ball off a rubber ring against a wall.
   - Student should try to hit the same general area on the wall (right and left foot).

   Teaching Hints:
   - The teacher should emphasize proper balance and kicking technique throughout.
6. Name: Ball Kick to Spot on Wall
   Equipment: Tape or white shoe polish, playground ball, rubber ring.
   Description: A large square (one yard square) is drawn on the wall with either tape or shoe polish.
   - Student kicks a playground ball off a rubber ring and hits the square (right and left foot).

   Teaching Hints:
   - Vary the distances from the wall.

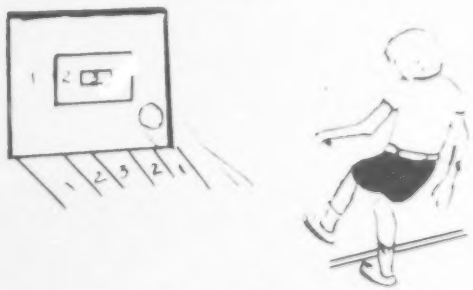


Fig. 3 Ball Kick to Spot on Wall

7. Name: Ball Kick at Bowling Pin
   Equipment: Balls, bowling pins
   Description:
   - Kick ball off rubber ring at plastic or wooden bowling pin (right and left foot).

   Teaching Hints:
   - Always have student kick the ball in the same spot.
   - Vary the distance.
   - Award a point each time the student knocks the pin down.
8. Name: Ball Kick into Basket
   Equipment: Playground ball, rubber ring, wastebasket.
   Description:
   - Kick a playground ball off a rubber ring into a wastebasket lying on its side with the opening facing the student (right and left foot).

   Teaching Hints:
   - Have the student vary positions – kick from in front directly into the center of wastebasket, kick from the left side, kick from the right side.
   - Vary the distances.
   - Emphasize proper balance and technique.
9. Name: Ball Kick Between Pins
   Equipment: Playground ball, rubber ring, two bowling pins.
   Description:
   - Have student kick a playground ball off a rubber ring between two bowling pins that are two feet apart. The object is not to knock down the bowling pins (right and left foot).

   Teaching Hints:
   - Vary the distance.
   - This can be played with a partner, pins set up between them with the students taking turns.
   - Emphasize proper balance and technique.

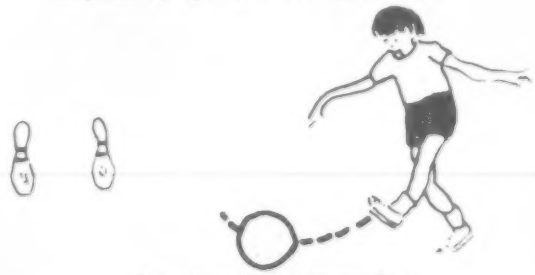


Fig. 4 Ball Kick Between Pins

10. Name: Kick Suspended Ball
    Equipment: Large whiffleballs suspended from overhead support.
    Description:
    - Student kicks stationary ball with right and left foot.
    - Student kicks moving ball with right and left foot.

    Teaching Hints:
    - Adjust height of whiffleball so that the contact is made during various leg positions.
    - Permit kicking a moving ball only after the child achieves success with the stationary task.
    - Increase the difficulty of contacting the moving whiffleball by releasing it in an arc.

Fig. 5 Kick Suspended Ball

11. Name: Punt Ball into Air
    Equipment: Ball
    Description:
    - Have student punt the ball over his head and catch it when it comes down (right and left foot).

    Teaching Hints:
    - Have student hold ball waist high.
    - Stress placing the ball on the toe not dropping it down.
    - Emphasize follow-through and extension of kicking leg.
    - Emphasize control – not kicking for distance.

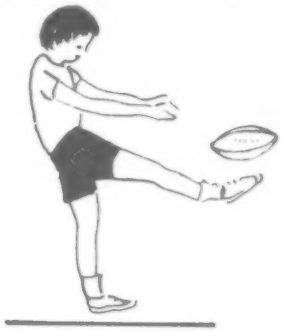


Fig. 6 Punt Ball into Air

12. Name: Kick A Ball Rolled to the Student
    Equipment: Playground ball
    Description:
    - Roll a playground ball to the student and have him kick it back to you with right, then left foot.

    Teaching Hints:
    - Emphasize proper balance and technique.
    - Vary the kicking distance.
    - Stress keeping eyes on the ball until it leaves the foot.

13. Name: Kick A Rolled Ball into a Basket
    Equipment, Ball, basket
    Description:
    - Have student kick a ball that is rolled to him into a wastebasket turned on its side, with right and left foot.

    Teaching Hints:
    - Emphasize proper balance and technique.
    - Have the basket situated on left and right sides of the person rolling the ball.

Fig. 7 Kick Ball into Basket

14. Name: Run and Kick Ball into Basket
    Equipment: Ball, basket
    Description:
    Roll a ball along the ground.
    Have student run next to it.
    When the ball rolls past the basket, the student tries to kick the ball into the basket.

    Teaching Hints:
    Emphasize proper balance and technique.
    Explain that the student must wait until the ball rolls in front of the open basket.

15. Name: Kick A Bouncing Ball
    Equipment: Ball
    Description:
    Have student drop a ball and kick it as it leaves the floor (right and left foot).
    Have partner toss the ball gently so that it bounces to the kicker (right and left foot).
    Have the child perform the first two tasks with an added dimension – a target area.

    Teaching Hints:
    Emphasizes proper balance and technique.
    Stress the importance of keeping the eyes on the ball until it leaves the foot.
    Follow sequence until success is attained at each level.

16. Name: Kick A Thrown Ball at a Wall Square
    Equipment: Ball, tape or white shoe polish
    Description:
    The student kicks a thrown ball, about knee high, at a square on the wall (right and left foot).

    Teaching Hints:
    Emphasize proper balance technique.

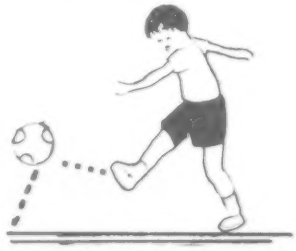


Fig. 8 Kick Bouncing Ball

ARM/SHOULDER STRENGTH[1]

1. Name: Puppy Dog
   Equipment: Mat
   Description: Have the student assume a "puppy" position on the mat. On command, the student:
   - Raises and extends his left hand forward and places it on the mat.
   - Brings left knee forward.
   - Repeats movement with his right hand and right leg.
   - Repeats the task.

   Teaching Hints:
   - Tell the student he is a puppy and he is to use his imagination in moving.
   - Have "puppies" move to various auditory stimuli, i.e., bongos, hand clapping, music, etc.

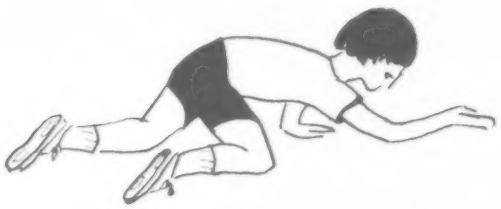


Fig. 1 Puppy Dog

2. Name: Turtle Walk
   Equipment: Mat
   Description: Have the student assume the "turtle" position, with hands, knees and toes touching the mat. On command, the student:
   - Moves left knee forward to heel of left hand.
   - Extends right hand forward and places on the mat.
   - Brings right knee forward in line with left hand. Repeat.

   Teaching Hints:
   - Refer to No. 1 above.

3. Name: Frog Hop
   Equipment: Mats, Shoe Polish
   Description: Have the student assume the "frog" position on the mat. On command, the student:
   - Extends both hands forward and places them on the mat.
   - Transfers body weight to arms.
   - Lifts both feet simultaneously and places them behind the heels of the hands (hopping fashion).
   - Repeat

   Teaching Hints:
   - Vary the task by placing a series of patterns on the floor for the students to follow.

[1]Refer to Appendix G for necessary supply and equipment needs.

Fig. 2 Frog Hop

4. Name: Crab Walk
   Equipment: None
   Description: Have the student sit on the floor and assume a "crab" position, with his hands placed adjacent to his buttocks. On command, the student:
   Raises his trunk from the floor so that body weight is supported by the hands and feet.
   - Moves forward.
   - Moves backward.
   - Moves sideward.

   Teaching Hints:
   - Stress moving slowly at first, taking short steps, and keeping the body off the floor.
   - Introduce the game of "crab soccer" as soon as the students become proficient "crab walkers." Crab soccer involves two teams who face each other in the crab-sitting position. The object of the game is to propel a large cage ball across your opponent's end line.

Fig. 3 Crab Walk

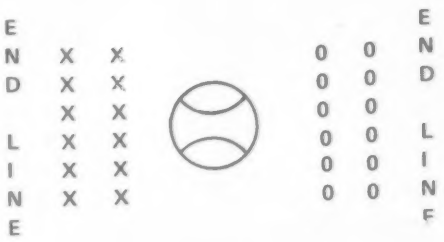


Fig. 4 Crab Soccer

5. Name: Seal Crawl
   Equipment: Mat
   Description: Have the student assume a "seal" position by lying face down on the mat. On command, the student:
   - Places his hands under his shoulders, with palms down and elbows bent.
   - Raises his upper body, by straightening his arms.
   - Travels forward by alternately extending the arms and dragging the legs.

   Teaching Hints:
   - Have the students make seal sounds as they move.
   - After the skill has been mastered, add the competitive element by conducting seal races.

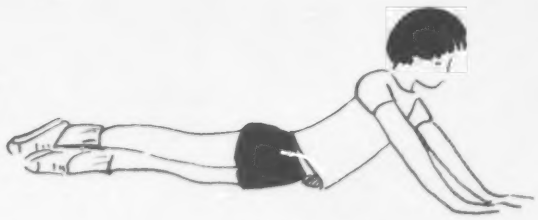


Fig. 5 Seal Crawl

6. Name: Inch Worm
   Equipment: None
   Description: Have the student assume a "worm" position by lying face down on the floor, with the arms extended forward and the palms on the floor. On command, the student:
   - "Walks" the legs toward his hands, keeping the hands and forearms in place until the body forms a bridge.
   - "Walks" the arms away from the feet until the body is in the original position.
   - Repeat the tasks.

   Teaching Hints:
   - Demonstrate the task before having students perform.
   - Encourage "walking" forward as far as possible to create a "high bridge."

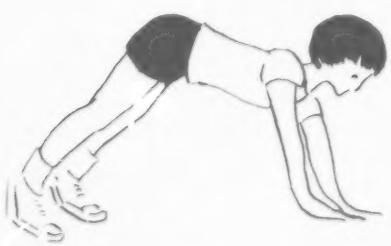


Fig. 6 Inch Worm

7. Name: Cheese[1]
   Equipment: Parachute (mousehouse), two-four balls of any size (cheese).
   Description: Students form a circle around a parachute and hold the edges. One student is selected as the *mouse*, another student is the *cat*. The object of the game is for the cat to catch the mouse before the mouse brings all of the cheese (the balls) into his house. On the command:
   - "Up" the parachute is lifted and the mouse leaves his house in an effort to retrieve the cheese while the cat tries to catch him.
   - "Down," the parachute is lowered. If the cat catches the mouse, he has the option of becoming the mouse (and select a new cat), or selecting a new mouse. If the mouse gets all the cheese in his house, he may select a new cat, or be the cat and select a new mouse.

   Teaching Hints:
   - Increase the time the "house" must be held in the "up" position.
   - Make the task more strenuous by requiring the students to raise and lower the parachute continuously.

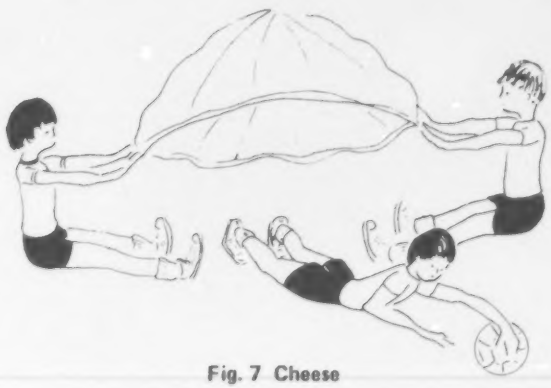


Fig. 7 Cheese

8. Name: Hand Push
   Equipment: None
   Description: Pair two students and have them face one another, toe-to-toe. On command, both students:
   - Place their hands in front of their shoulders, with palms facing away from their bodies, in contact with the partner's hands.
   - Exert maximum pressure against each other's hands.
   - Relax.
   - Repeat.

   Teaching Hints:
   - Pair students according to size and strength.
   - Remind students to keep their feet in place at all times.

[1] Devised by first grade classes at the Alan B. Shepard Elementary School, Madison Township, New Jersey.

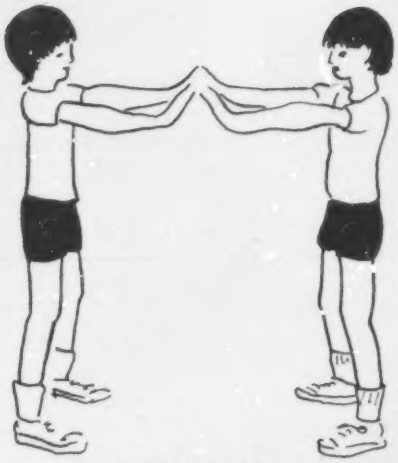


Fig. 8 Hand Push

9. Name: Wall Push-up
   Equipment: None
   Description: Have student assume a standing position facing the wall, with the toes six to twelve inches from the wall. On command, the student:
   - Places his plams on the wall, shoulder height, with his hands shoulder width apart.
   - Leans forward and flexes his elbows until his chin touches the wall.
   - Returns to the starting position by extending his arms.
   - Repeats the exercise.

   Teaching Hints:
   - Stress proper body alignment at all times to prevent postural problems. (Proper alignment implies straight back, with the neck and head directly over the shoulders.)
   - Increase the difficulty of the task as arm strength develops by increasing the distance of the feet from the wall and/or the spacing of the hands on the wall.

Fig. 9 Wall Push-Up

10. Name: Modified Push-up
    Equipment: Mat
    Description: Have the student assume a six-point stance on the mat (i.e., toes, knees, and palms of the hands in contact with the mat). On command, the student:
    - Lowers his body to the floor by bending his elbows until his chin contacts the mat.
    - Returns to the upright position.
    - Repeats the exercise.

    Teaching Hints:
    - Stress proper body alignment throughout the movement.
    - Increase the difficulty of the task as arm strength develops by placing the hands farther forward, increasing the space between the hands and/or increasing the number of repetitions.

Fig. 10 Modified Push-Up

11. Name: Stall Bar Bench Push-up
    Equipment: Stall Bar Bench, or Stool
    Description: Have the student assume a regular push-up position, with hands grasping the sides of the bench. On command, the student:
    - Lowers his body until his chest contacts the bench.
    - Returns to the original position by extending his arms.
    - Repeats the exercise.

    Teaching Hints:
    - Reduce the height of the bench to increase stress on the arms and shoulder girdle.

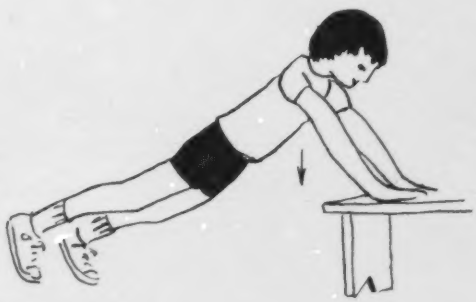


Figure 11 Stall Bar Bench Push-Up

12. Name: Regular Push-up
Equipment: None
Description: Have the student assume a regular push-up position on the floor, with palms of the hands directly under the shoulders. On command, the student:
- Lowers his body until his chest touches the floor.
- Returns to the upright position.
- Repeats the exercise.

Teaching Hints:
- The difficulty of the task can be increased by: moving hands forward, increasing the space between the hands and/or raising the level of the feet above the hand position (e.g., inverted push-up).
- Remind student to touch chest rather than chin to the floor.

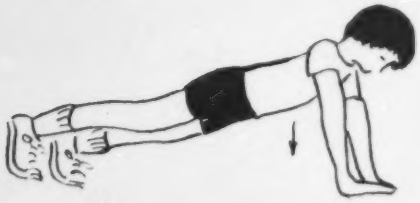


Fig. 12 Regular Push-Up

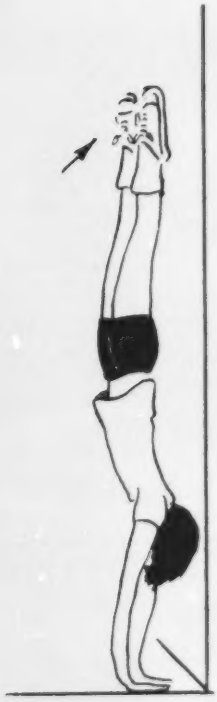


Fig. 12a Inverted Push-Up

13. Name: Overhead Ladder Traveling
Equipment: Overhead Ladder
Description: Have the student jump and grasp a ladder rung with an overhand grip. On command, the student:
- Releases the rung with his right hand and grasps the second rung with the right hand.
- Release the rung with his left hand and grasp the second rung with the left hand.

Fig. 13 Overhead Ladder

14. Name: Parallel Bar Traveling
Equipment: Parallel Bars
Description: Have the student jump to a support position, with the arms extended. On command, the student:
- "Hand walks" the length of the bar.

Teaching Hints:
- Apply hand chalk.
- Shift body weight to the side opposite the hand being lifted to permit ease of movement.
- Raise the forward end of the bar to make the task more difficult.

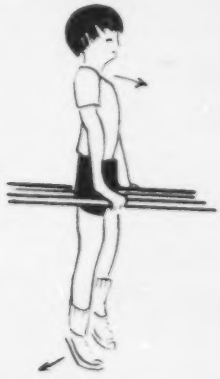


Fig. 14 Parallel Bar Traveling

15. Name: Static Arm Hang
Equipment: Pull-up Bar, Stall Bar Bench
Description: Assist the student to the flexed arm hang position on the bar, with overhead grip and head above the bar. On command, the student:
- Endeavors to maintain the flexed arm hang position for as long as possible.

Teaching Hints:
- Use of a stop watch will permit the teacher to "time" the student's performance. Start the timer when the student assumes the flexed arm hang position; stop the timer when the arms are completely extended.
- The task can be made easier by having the student use the underhand grip (i.e., palms facing toward the body).
- Use hand chalk.

Fig. 15 Static Arm Hang

16. Name: Pull-ups
Equipment: Pull-up Bar
Description: Have the student grasp the bar, overhand grip, with his body extended and feet off the floor. On command, the student:
- Pulls with his arms until his chin is above the bar.
- Lowers his body until his arms are completely extended.
- Repeats the exercise.

Teaching Hints:
- Use of the underhand grasp will make the task easier.
- Stress full arm extension before starting the next pull-up.
- Use hand chalk.

17. Name: Parallel Bar Dips
Equipment: Parallel Bars
Description: Have the student jump to a cross support position on the parallel bars. On command, the student:
- Lowers his body by flexing his arms until his shoulders contact the bars.
- Return to the cross support position.
- Repeats the exercise.

Teaching Hints:
- Use hand chalk.
- Extremely difficult task. If the student cannot perform, start with only partial flexing of the arms.
- Vary the task by having the student perform "swinging dips" (i.e., flexing the elbows on the forward swing and extending the elbows as the body moves to the rear).

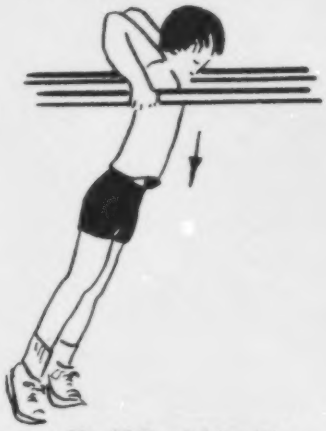


Fig. 16 Parallel Bar Dips

18. Name: Shoulder Shrugs
Equipment: Barbell, Weights
Description: Have the student grasp a barbell with the overhand grip, stand upright, with the arms extended and the barbell resting on the thighs. On command, the student:
- Raises the barbell by lifting his shoulders while maintaining the arm extension position.
- Adducts shoulders (brings shoulder blades together).
- Maintains raised and adducted position for five seconds.
- Returns to original position.
- Repeats the task.

Teaching Hints:
- Tell the student to try to touch his ears with his shoulders.
- Emphasize arms straight at all times.
- When the skill is mastered, include the proper breathing procedure (i.e., inhale during lifting phase and exhale during lowering phase).
- Adjust weights according to individual needs.

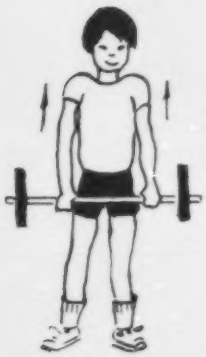


Fig. 17 Shoulder Shrugs

19. Name: Curl-Up
    Equipment: Barbell, Weights
    Description: Have the student grasp the barbell underhand and assume a standing position, with feet shoulder width, arms extended and the barbell resting on his thighs. On command, the student:
    - "Curls" the barbell upward, by flexing his arms, until it touches his chest.
    - Lowers the barbell, by extending his arms, until it touches his thighs.
    - Repeats the task.

    Teaching Hints:
    - Avoid "arching" the back to prevent injury. The teacher can minimize this problem by having the student stand with his back to a wall.
    - Emphasize full extension of the arms, when the weight is lowered.
    - Add the proper breathing procedure when the skill is mastered.
    - Adjust weight according to individual needs.

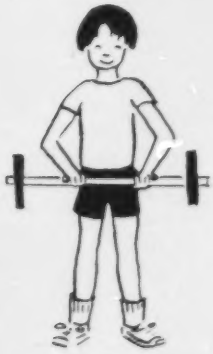


Fig. 18 Curl-Up

20. Name: Reverse Curl-Up
    Equipment: Barbell, Weights
    Description: The same procedure as when performing curl-ups except the student grasps the barbell with an *overhand grip.*

    Teaching Hints:
    - The same as for curl-up exercise.
    - The overhand grip places more emphasis on developing the strength of the wrists and forearms.

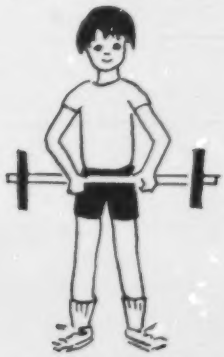


Fig. 19 Reverse Curl-Up

21. Name: Overhead Press
    Equipment: Barbell, Weights
    Description: Have the student grasp the barbell with an overhand grip and raise to the shoulder support position, i.e., feet shoulder width apart and the barbell resting against the upper chest. On command, the student:
    - Raises the barbell to the full arm extension position.
    - Maintains the position for five seconds.
    - Returns the barbell to the original position.
    - Repeats the exercise.

    Teaching Hints:
    - Preface task by teaching the student "how" to lift the barbell from the floor properly (i.e., raising the weight by extending the legs, with a straight back).
    - Place a "spotter" on both sides of the "lifter" and have them ready to grasp the barbell if the student weakens.
    - Minimize "arching" of the back.
    - Adjust weights according to individual needs.
    - Add weights as the student attains a pre-determined goal.

Fig. 20 Overhead Press

22. Name: Tube Tug
Equipment: Bicycle Tire Tubes, Goal Markers, Mats
Description: Set goal markers 30' apart 2 yards wide. Place mats beyond the goal markers. Have two contestants grasping a tube in the center between the goals. On command, the contestants:
- Lift the tube and begin tugging.
- Endeavor to place one foot beyond and between one of their goal markers.

Teaching Hints:
- Record one point each time a student steps over and between his goal markers.
- Establish a time limit for equally-matched contestants.
- Place mats to prevent injuries.

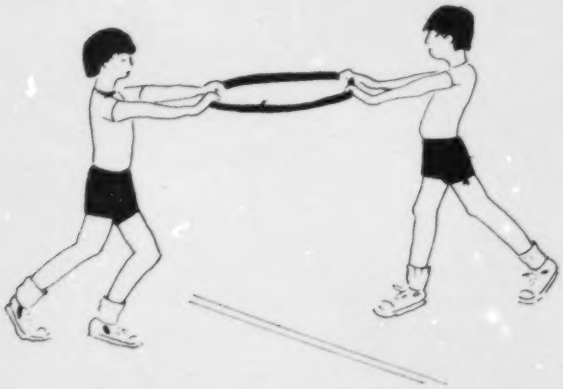


Fig. 21 Tube Tugging

23. Name: Tug-Of-War
Equipment: Long heavy rope with large loops at each end
Description: Place a team of 6 to 12 members at each end of the rope the last team member is inside the loop of rope at each end. Upon signal, the contestants:
- Tug until one team can pull the other team beyond a pre-determined distance.

Teaching Hints:
- Conduct on grass to minimize accidents.
- Be alert and call "time" if any player loses footing and falls down.

Fig. 22 Tug-Of-War

24. Name: Scooter Race
Equipment: One Scooter Per Student
Description: The students lie on scooters in a prone position behind the starting line, with the scooters positioned under their hips; the students: legs are extended rearward or bent upward. On command, the students:
- Propel themselves forward by using both hands.
- Stop when they cross the finish line.

Teaching Hints:
- Award team points to increase the competitive element.
- Make the task more difficult by requiring the use of only one hand.
- Disqualify those students whose feet touch the floor.

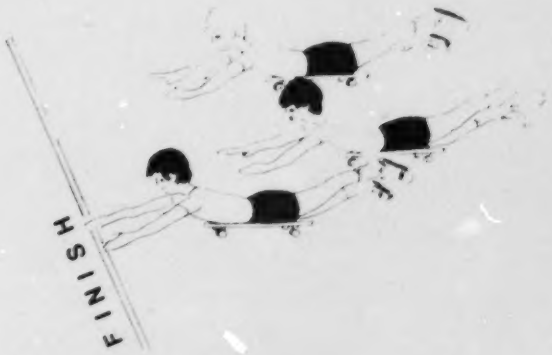


Fig. 23 Scooter Race

25. Name: "Pullovers"
Equipment: Barbell, Weights, Mat
Description: Have the student lie in a supine position, with arms extended overhead. On command, the student:
- Grasps the barbell, with the arm fully extended.
- Moves the barbell forward until it touches the thighs.
- Returns the barbell to the original position.
- Repeats the exercise.

Teaching Hints:
- Have student observe the contraction of the chest muscles as the barbell approaches thighs – development of back muscles as the barbell nears the mat.
- If necessary, make the exercise achievable by having the student flex the arms slightly or use minimum weights.
- Max mize repetitions and minimize weight of barbell to increase expenditure of energy.
- Minimize repetitions and maximize weight of barbell to increase muscle bulk.
- Minimize "arching" of the back.

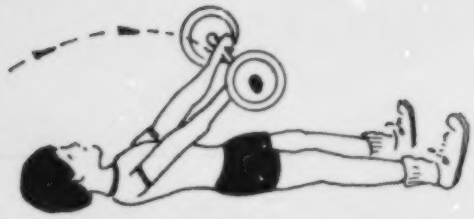


Fig. 24 Pullovers

ABDOMINAL STRENGTH

1. Name: Belly Dance
   Equipment: Mats
   Description: Have student lie on back, legs extended, place hands on abdominal wall, and contract muscles of the abdomen; then, relax muscles.
   Teaching Hints:
   - Concept to stress is that working muscles can be felt.
   - Vary task by performing in a standing position.
   - Place table tennis ball on abdomen and try to roll the ball off the stomach by contracting and relaxing the abdominal muscles.

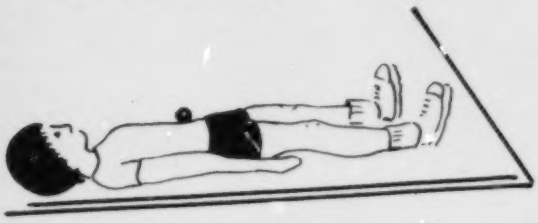


Fig. 1 Belly Dance

2. Name: Alternate Knee Bend
   Equipment: Mats
   Description: Have student lie on back with his legs extended and hands placed behind head. On command, have student:
   - Bring right knee up to chest.
   - Return to starting position.
   - Bring left knee up to chest.
   - Return to starting position.
   - Repeat.

   Teaching Hints:
   - Place hands on abdominal wall to feel muscles working.

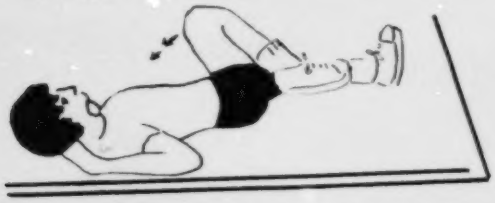


Fig. 2 Alternate Knee Bend

3. Name: Knee Bend
   Equipment: Mats
   Description: Have student lie on back, legs extended, and hands placed behind head. On command, have student:
   - Slide feet along mat or floor until heels touch buttocks.
   - Return to starting position.

   Teaching Hints:
   - Remind student to keep feet in contact with the floor and to keep lower black flat on the floor by rotating hips downward.

Fig. 3 Knee Bend

4. Name: Knee Raise
   Equipment: Mats
   Description: Have student lie on back, legs extended, feet together, heels on floor, with hands along side of the body. On command, have student:
   - Slide feet along the mat until heels touch the buttocks.
   - Bring knees to chest, keeping heels close to hips.
   - Raise hips by rounding back.
   - Hold position for three seconds.
   - Return to starting position.

   Teaching Hints:
   - Stress "tuck" rather than "arched" body position. Increase repetitions as abdominal strength improves.

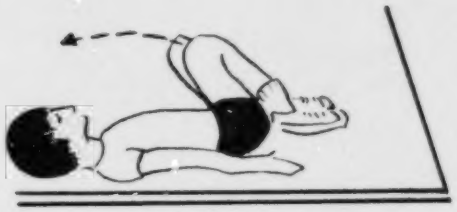


Fig. 4 Knee Raise

5. Name: Knee Circles
   Equipment: Mats
   Description: Have student lie on back, knees bent to chest, and hands behind head. On command, have student:
   - Rotate knees in small circular pattern to the right.
   - Reverse direction.
   - Rotate knees in alternate circles.

Fig. 5 Knee Circles

Teaching Hints:

- If abdominal muscles are weak, have students wrap arms around knees to hold legs in position.
- Increase the size of the circles as abdominal strength increases.

6. Name: Leg Stretcher
   Equipment: Mats
   Description: Have student lie on back, knees bent, feet flat on mat, and hands behind the head. On command, have the student:
   - Bring right knee to chest.
   - Extend right leg to vertical position.
   - Lower extended leg to the floor.
   - Repeat exercise with the left leg.

   Teaching Hints:
   - Dorsiflex and plantar flex feet to stretch and contract lower leg muscles.

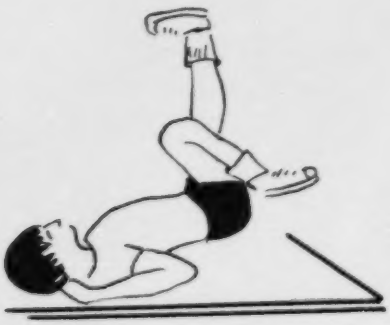


Fig. 6 Leg Stretcher

7. Name: Inverted Bicycle Ride
   Equipment: Mats
   Description: Have student lie on back, knees bent, buttocks raised off mat, with body weight supported by bent arms and hands under hips. On command, have the student:
   - Move legs as if riding a bicycle.

   Teaching Hints:
   - Elevate hips until they are above shoulders to maintain proper balance.
   - Increase cycling time duration at periodic intervals.

Fig. 7 Inverted Bicycle Ride

8. Name: Partial Curl-Up
   Equipment: Mats
   Description: Have student lie in a supine position, hands resting on front of thighs, and elbows straight. On command, have the student:
   - Tuck chin in and lift head and shoulders until the shoulder blades are clear of the mat.
   - Hold curled position for five seconds.
   - Return to starting position.

   Teaching Hints:
   - Assist student with weak abdominals by holding his feet down and/or pulling him to the partial sit-up position.
   - Vary the exercise by having the student perform rhythmically.
   - Discourage "straight back" sit-ups as it can be injurious to the lower back.

Fig. 8 Partial Curl-Up

9. Name: Curl-Up
   Equipment: Mats
   Description: Have student lie in a supine position, with the palms of the hands resting on the thighs, and elbows straight. On command, have the student:
   - Tuck chin in and lift head and shoulders off the mat.
   - Slide palms forward, arms extended, until the fingertips touch the top of the kneecap.
   - Return to starting position.

   Teaching Hints:

- Stress maintenance of a steady rhythm, keeping palms in contact with the thighs, and only rising to fingertip-kneecap position.
- Have students work in pairs – one student performs the curl-up, the partner extends one arm across the performer's kneecaps and keeps record of the number of correct curl-ups.

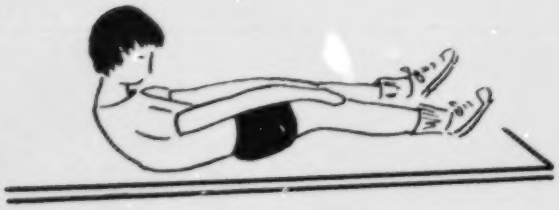


Fig. 9 Curl-Up

10. Name: Reverse Curl-Up
    Equipment: Mats
    Description: Have the student sit in an upright position on the mat, arms extended, and palms resting on the thighs. On command, have the student:
    - Flex the lumbar spine.
    - Slowly assume the lying position on the back with the lumbar region touching the mat before the thoracic region.
    - Return to the upright position by reversing the process.

    Teaching Hints:
    - Vary the position of the hands according to individual capability. Placing palms on thighs requires less abdominal effort. Placing hands behind the head or overhead creates more abdominal stress.
    - The reverse curl-up should be sequenced before the curl-up because the performer is assisted by the pull of gravity in the former task.

11. Name: Bent Knee Sit-up
    Equipment: Mats
    Description: Have student lie on back, knees bent, feet flat on mat, and hands behind the head. On command, have the student:
    - Curl torso up to sit-up position.
    - Touch elbows to knees.
    - Hold sit-up position for five seconds.
    - Return to starting position.

    Teaching Hints:
    - Have students who have trouble with bent knee sit-ups work in pairs. One student holds his partner's feet securely on the mat.
    - Student can use wall, mats, and any other device to secure legs.
    - Increase difficulty of the task by having the student perform sit-ups on an incline board, or by placing a weight in the hands behind the head.

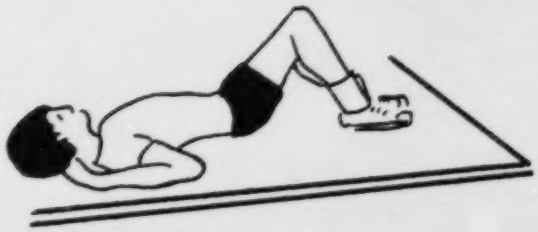


Fig. 10 Bent Knee Sit-Up

12. Name: Cross-over Sit-Up
    Equipment: Mats
    Description: Have the student lie on back, knees bent, feet flat on the mat and hands behind the head. On command, have the student:
    - Curl torso up to sit-up position.
    - Touch right elbow to left knee.
    - Return to sit-up position.
    - Touch left elbow to right knee.
    - Return to sit-up position.
    - Return to supine position.
    - Repeat.

    Teaching Hints:
    - Remind student not to arch lower back.
    - Hands must remain clasped behind head. If hands are removed from behind the head, the student will tend to use the arms to add momentum to the sit-up. This action will minimize development of the abdominal muscles.

Fig. 11 Cross-Over Sit-Up

13. Name: Inclined Sit-Ups
    Equipment: Inclined Board
    Description: Have the student assume a supine position on the board. On command, have the student:
    - Curl to sit-up position and touch toes.
    - Return to the supine position.

    Teaching Hints:
    - Vary the exercise in accordance with the abdominal strength of the individual. A sample sequence might include: (board secured at the second notch).
    - Practice until 10 curl-ups can be performed.
    - Perform 10 sit-ups, with arms extended.
    - Perform 10 sit-ups, with hands behind neck.
    - Perform 10 cross-over sit-ups with a weight held behind the neck.

- Readjust the board to the third notch and repeat the sequence.
- Insure that students keep the knees in a flexed position throughout all exercises to minimize lower back strain.

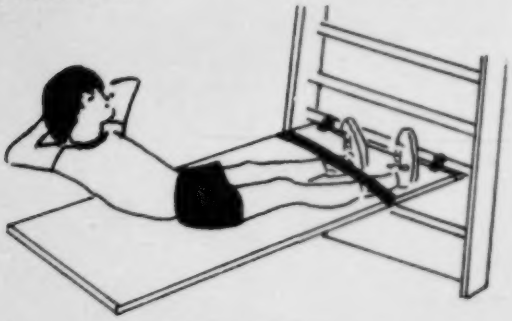


Fig. 12 Inclined Sit-Up

14. Name: Vee Sit-Up
    Equipment: Mats
    Description: Have the student assume a supine position on the mat, with arms and legs extended. On command, have the student:
    - Raise upper torso and straighten legs simultaneously.
    - Balance body weight on buttocks.
    - Touch extended hands to toes, while maintaining balance.
    - Return to supine position.
    - Repeat.

    Teaching Hints:
    - A difficult task which requires considerable abdominal strength, coordination, and balance.
    - Use the part-whole method. Have the students perform the component parts of the task until mastered before attempting the Vee sit-up.

Fig. 13 Vee Sit-Up

15. Name: Gather Sit-ups
    Equipment: Mats
    Description: Supine position on mats, with arms extended overhead. On command, have the students:
    - "Curl" upper torso forward, bringing arms toward toes.
    - Flex knees, with heels touching the buttocks.
    - Wrap arms around knees and squeeze.
    - Return to starting position.
    - Repeat.

    Teaching Hints:
    - When raising upper torso, have students roll the head, neck, shoulders, upper back, and lower back forward in that order. Reverse the process when returning to the supine position.
    - Encourage diaphragmatic breathing by having students inhale when moving to a sit-up position and exhaling during the "squeezing" phase of the exercise.

Fig. 14 Gather Sit-Ups

EXPLOSIVE LEG POWER

1. Name: Point Toes
   Equipment: Mat
   Description: Have the student assume a supine position on the mat. On command, have the student:
   - Dorsiflex left foot.
   - Plantar flex left foot.
   - Return to starting position.
   - Repeat with right foot.
   - Return to starting position.

   Teaching Hints:
   - When working with a child who does not understand the explanation or does not exhibit muscular control, it will be necessary to assist the individual through the exercise.
   - Have students work in pairs. One student applies pressure on the performer's feet; the performer endeavors to point his toes.
   - Vary the task by having the student flex or extend both feet simultaneously.
   - Have the student note which muscles contract during the flexion and extension phases of the exercise.

Dorsiflexion **Plantar Flexion**

Fig. 1 Point Toes

2. Name: Bend the Knee
Equipment: Mat
Description: Have students work in pairs. One student lies down on his back. The partner places one hand under his right knee while the other hand grasps his right ankle. On command:
- The performer endeavors to maintain the extension position while the partner strives to flex the knee. The partner shifts his hands to the performer's left leg and the task is repeated.
- Partners exchange positions.

Teaching Hints:
- Variations: Maintaining knees in the flexed position; applying pressure to performer's feet as he endeavors to ride a bicycle in the inverted position (on his back).

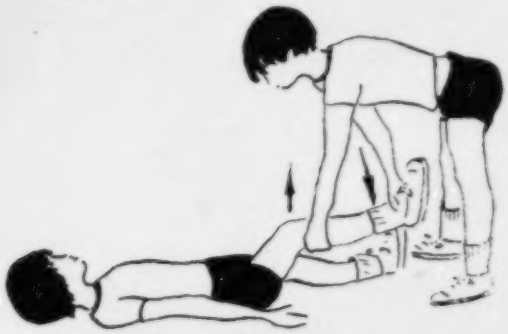


Fig. 2 Bend the Knee

3. Name: Blast Off[1]
Equipment: None
Description: Have the student stand erect with his arms at his side. On command, the student:
- Lowers his body to a semi-squat position (the teacher counts to ten.)
- On the command of "blast off," the student jumps as high as possible and lands in the starting position.
- Repeats the task eight to ten times.

Fig. 3 Blast Off

Teaching Hints:
- Variations: Landing on the same spot each time; covering as much distance as possible on each "blast off."
- Caution the student to avoid flexing the knees beyond a 45 degree angle to avoid a knee injury.

4. Name: Jumping the Square
Equipment: White Shoe Polish
Description: The teacher draws a series of three-foot squares on the floor. Have the student stand on one corner of the square. On command, have the student:
- Jump to each corner sequentially in a counterclockwise direction.
- Jump to each corner sequentially in a clockwise direction.
- Vary directions, for example, "jump left to three corners and right to four corners, etc.".

Teaching Hints:
- Vary the tempo.
- Have student perform the task by hopping on an imaginary square.
- Add creativity by requesting the student act as a jack rabbit, kangaroo, etc.
- Have student move through imaginary obstacle courses. For example, jumping over a log, a stream, or a crack in the earth.

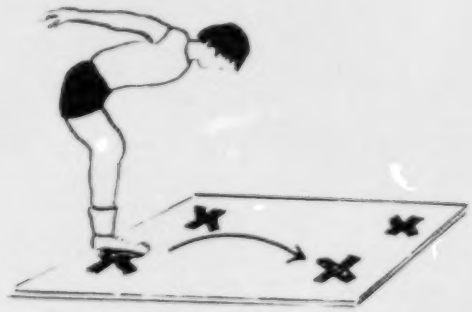


Fig. 4 Jumping the Square

5. Name: Leg Straightener[2]
Equipment: None
Description: Have the student sit erect, knees bent, heels on floor, with hands grasping toes. On command, have the student:
- Straighten legs while maintaining hold on toes.
- Return to the starting position.
- Repeat the exercise.

Teaching Hints:
- Stress "pushing" action of legs and "pulling" action of hands.

[1] Educational Research Council of America, *Physical Education Program*

[2] Educational Research Council of America, *Physical Education Program*

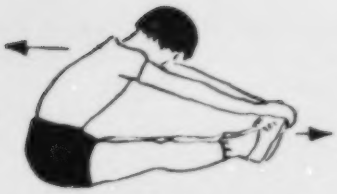


Fig. 5 Leg Straightener

6. Name: Tiptoes
   Equipment: None
   Description: Have the student stand erect. On command, have the student:
   - Rise up on his toes on the count of "1."
   - Return to standing position on the count of "2."
   - Repeat the task.

   Teaching Hints:
   - Have the student perform alternately on right and left foot.
   - Have the student feel the calf muscle and explain what happened.
   - Increase time duration for holding No. 1 position.
   - Place a text under the toes and perform.

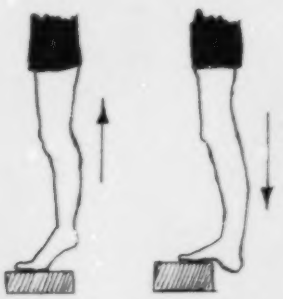


Fig. 6 Tiptoes

7. Name: Jump and Stretch
   Equipment: None
   Description: Have student stand erect with arms at sides. On command, have the student:
   - Swing arms backward while bending knees.
   - Jump for height and distance, stretching arms overhead.
   - Throw body and arms forward as he lands.
   - Repeat.

   Teaching Hints:
   - Have the child jump repeatedly across the gymnasium and keep a record of the total attempts.
   - Vary by excluding the use of the arms. Discuss the difference in distance resulting from the elimination of arm usage.
   - Record each student's best distance in inches.

Fig. 7 Jump and Stretch

8. Name: Jumping for Height
   Equipment: Chalk
   Description: Have students work in pairs. The performer should stand upright, adjacent to a wall, with a piece of chalk in his hand. On command, the performer:
   - Jumps as high as he can and makes a mark on the wall.
   - The partner measures and records the height.
   - Partners reverse positions and repeat.

   Teaching Hints:
   - Mark a grid on the wall, with graduations in inches.

   Variation: Have each partner jump, repetitively, for one minute and record the number of jumps.

Fig. 8 Jumping for Height

9. Name: Mountain Climbing
   Equipment: None
   Description: Have student assume push-up position, with one leg flexed and the other in the extended position. On command, have the student:
   - Reverse his leg position continuously.

   Teaching Hints:
   - Establish a slow cadence, initially, so that the student can learn the coordinated movement.
   - By having the student transfer all body weight to his arms as he shifts his leg position, the task becomes an arm strengthening exercise.

Fig. 9 Mountain Climbing

10. Name: Squats (Knee Bends)
    Equipment: None
    Description: Have the student stand erect, feet shoulder width apart, with hands on hips. On command, have the student:
    - Lower his body so that knees are flexed at a 45 degree angle.
    - Maintain position for five seconds.
    - Return to the starting position.

    Teaching Hints:
    - Increase repetitions at periodic intervals.
    - Caution student regarding the performance of knee bends beyond 45 degrees.

Fig. 10 Squats (Knee Bends)

11. Name: Barbell Squats
    Equipment: Barbell, plus Assorted Weights
    Description: Have the student stand erect, feet shoulder width apart, with barbell on shoulders.
    On command, have the student:
    - Perform the task as cited in No. 10.

    Teaching Hints:
    - Have the student start the program by placing weights on the barbell equal to one-third of his body weight. Increase or decrease the weight level until he performs a range of five to ten repetitions with a specific weight. From that point on, have the student use the same weight load until he can perform ten repetitions, and then increase the weight load.

Fig. 11 Barbell Squats

12. Name: Barbell Heel Raises
    Equipment: Barbell plus Assorted Weights, Plank
    Description: Have the student stand erect, with toes on 2' x 4', feet shoulder width apart, and barbell on shoulders. On command, have the student:
    - Extend body upward until the entire body weight is supported by his toes.
    - Maintain the position for five seconds.
    - Return to the starting position, with his heels on the floor.

    Teaching Hints:
    - Determine appropriate barbell weight and exercising regimen as per instructions in No. 11.
    - Vary the angle of the feet to develop different musculature.
    - Vary the height of the support that is placed under the toes.

Fig. 12 Barbell Heel Raises

13. Name: Wall Tapping
Equipment: Timer
Description: Marks are made on a wall at 3" intervals. The student is to stand adjacent to the wall. On command, the student:
- Jumps as high as he can and touches the wall as high as he can reach.
- Repeats the task for one minute.
- Attempts to continually jump above a predetermined mark, i.e., above 3, 6, 9, or 12 inches.

Teaching Hints:
- Have a partner record his score, that is the number of successful jumps.
- Record his highest "touch point."
- Record a measure of his explosive leg power – jumping touch minus standing touch.

Fig. 13 Wall Tapping

14. Name: Flutter Kick
Equipment: Mats
Description: Prone position on the mat, with hands under thighs and legs extended together. On command, the student:
- Keeps chin and trunk in contact with the floor.
- Alternately raises and lowers legs as in the flutter kick in swimming.

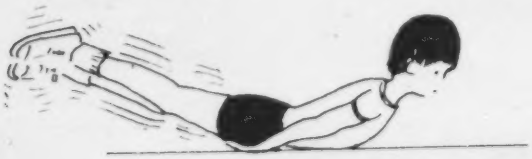


Fig. 14 Flutter Kick

Fig. 15 Crossover

Teaching Hints:
- Start with a slow cadence for a limited period of time.
- Increase cadence and time demand as progress is noted.
- Add verbalization by having students count every time the left foot strides the floor.
- Have the students perform the task while lying in a supine position.
- Vary the task – moving legs apart and together, or crossing one leg over the other.

CARDIORESPIRATORY ENDURANCE

1. Name: Marching-in-Place
Equipment: None
Description: Have the student stand at attention. On command, the student:
- Marches-in-place, starting with the left foot.
- Swings arms naturally.
- Counts each time his left foot strikes the floor.
- Stops when the teacher gives the command.

Teaching Hints:
- Vary the learning experience by: keeping the performance time and repetitions constant; increasing the time while keeping the repetitions constant.
- Have the students march to music.
- Observe performance and note bilaterality and/ or gross body coordination problems.

2. Name: Endurance Jumping
Equipment: None
Description: Have the student assume an upright standing position, with his arms at his sides. On command, the student:
- Jumps repeatedly, feet together, until requested to stop.
- Places fingers on carotid artery (under jawbone) and endeavors to locate pulse.

Teaching Hints:
- Explain the effects exercise has on the heart and circulatory system.
- Add music to make the task more enjoyable.
- Vary the repetitions according to individual capacities.
- Vary the task by having the student jump forward, backward, and sideward, with feet together and apart.

Fig. 1 Endurance Jumping

3. Name: Endurance Hopping
   Equipment: None
   Description: Have the student assume the upright standing position, with his arms at his sides. On command, the student:
   - Hops on his left foot.
   - Hops on his right foot.
   - Hops, alternately, on his left and right foot.

   Teaching Hints:
   - The same suggestions as for "Endurance Jumping."

Fig. 2 Endurance Hopping

4. Name: Spot Running[1]
   Equipment: Stop Watch
   Description: Have the student assume the upright standing position, with his arms at his sides in the flexed position. On command, the student:
   - Runs in place at varying speeds, for varying lengths of time.

   Teaching Hints:
   - Have the students change pace by telling them to imagine: they are running uphill, downhill, around a turn; or they are a racing car, horse, bus, truck, or a train.

5. **Name: Running A Measured Distance**
   Equipment: Stop Watch, Measuring Tape
   Description: Establish a measured distance. On command, the student:
   - Completes the run as rapidly as possible.

   Teaching Hints:
   - Recommended distances: grades K-2 – 200 yards; grades 3-6 – 600 yards; grades 7-9 – one mile; and grades 10-12 – two miles.
   - Add the competitive element by using team races, team relays, shuttle runs, and obstacle runs.

6. Name: Trot, Skip, Run[2]
   Equipment: None
   Description: Sub-divide the class into a series of teams aligned in line formation, facing the same direction. On command:
   - The first student in each line begins trotting.
   - The next student in each line begins trotting, when the first student has moved forward approximately eight feet.
   - Repeat the same procedure until all students in each line have completed the task.
   - When the first student of each line (the leader) has returned to the starting point, he or she begins again by skipping the entire distance.
   - The other students replicate the skipping.
   - The leaders will complete the third lap by running at full speed.

   Teaching Hints:
   - Have students select and include other types of locomotor skills.
   - Identify and assist students who are having difficulty with any of the locomotor skills.

7. Name: Ski Slalom Run
   Equipment: Stop Watches, Boundary Markers
   Description: Arrange markers as per the illustration. Space the markers so that the total distance is 25-60 yards. On command:
   - One student at a time runs the entire distance.
   - Repeat until the entire class has a time recorded.

   Teaching Hints:
   - The instructor "times" each student.
   - Vary the experience by conducting a continuous slalom (i.e., students traversing the course, keeping eight-foot intervals.

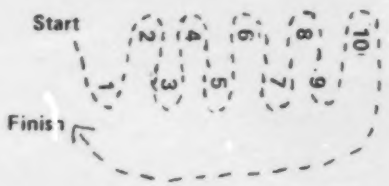


Fig. 3 Ski Slalom Run

[1] Thomas M. Vodola, *Individualized Physical Education Program for the Handicapped Child*, p. 161

[2] Orlalie Bryant and Eloise McLean Oliver, *Fun and Activities Through Elementary Physical Education*,

8. Name: Follow the Leader[1]
   Equipment: Record Player
   Description: Place students in a circle formation (ten to a circle).
   - A designated leader performs an exercise such as hopping.
   - The other students in the circle replicate.
   - When the instructor calls "change" the student to the left of the lead performs a different task.
   - The other students replicate.
   - Continue until all students have served as leaders.

   Teaching Hints:
   - Play a record that has a fast tempo to set the rhythm.
   - Encourage the inclusion of tasks that involve the different parts of the body.

9. Name: Astronaut[2]
   Equipment: None
   Description: Have the entire class form one large circle. Select one student to serve as the chief astronaut; have him stand in the center of the circle.
   - The chief astronaut calls No. 6 (or any number).
   - All astronauts whose numbers are six respond by running counterclockwise around the circle (space), reentering the circle (the earth's atmosphere) at their original positions, and touching the chief astronaut's extended hand.
   - The first astronaut to make contact becomes the new chief astronaut and calls a different number.

   Teaching Hints:
   - Vary the number of space revolutions before reentry is permitted.

10. Name: Red and Blue[3]
    Equipment: Flat Object, with each Side a Different Color
    Description: Divide the class into two lines facing each other. Explain and demonstrate the game. Select a leader to toss the colored object.

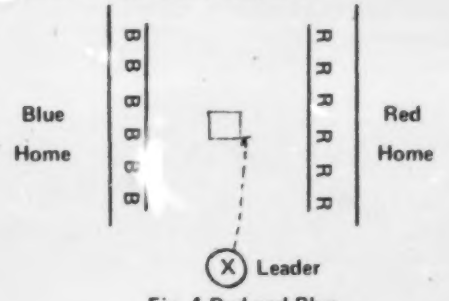


Fig. 4 Red and Blue

   - The leader tosses the object in the center area between the two teams.
   - If the object lands with the blue side up, all members of the "blue" team turn and run home, pursued by the "red" team.
   - If the object lands with the red side up, the procedure is reversed.
   - All players tagged before returning home join the opposing team.
   - The team having the most players in a predetermined time period wins.

   Teaching Hints:
   - Stress the importance of being careful to avoid injury.
   - Use blue and red pinnies or vests, if available.
   - If available, use flag belts to minimize arguments as to whether a player was tagged.

11. Name: Grab the Tire
    Equipment: Car Tire
    Description: Divide the class equally into two teams and assign a number to students on both teams. Place the teams at the opposite ends of the gym and the tire in the center.
    - The instructor calls a number.
    - The students with that number run to the center and try to drag the tire beyond their line.
    - Score one point for each successful attempt.
    - Continue until all numbers have been called.

    Teaching Hints:
    - Vary the game by calling multiple numbers (e.g., 2, 6, 10). In the example cited, six students would run to the center.
    - Combine mathematics with the motor task. For example, state, "Those students whose numbers are a total of 3 + 5 run forward."

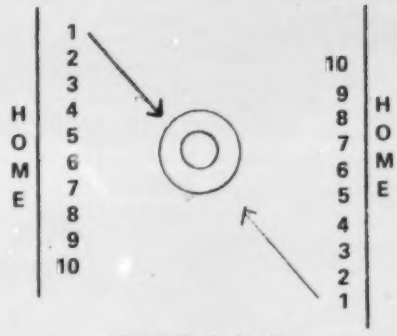


Fig. 5 Grab the Tire

12. Name: Change Places
    Equipment: Mats
    Description: Divide the class into two teams, placing the teams at opposite ends of the room with each team member assigned a number and requested to lie on a mat. Upon verbal command, the students:

[1] Charles B. Corbin, et al., *Concepts in Physical Education*, p. 61.

[2] Orlalie Bryant and Eloise McLean Oliver, *Fun and Activities Through Elementary Physical Education*, p. 51.

[3] *Ibid*, pp. 77-78.

- Obey commands, e.g., "Turn on your stomach, back, etc."
- Exchange mat positions with their partners.

Teaching Hints:

- Award team points on the basis of proper task execution and reaching designated mat first.
- To minimize accidents, have students run to new mat positions around the outer perimeter of the mats in a clockwise direction.
- Vary tasks to include diving, etc.
- Assign students to give verbal commands.

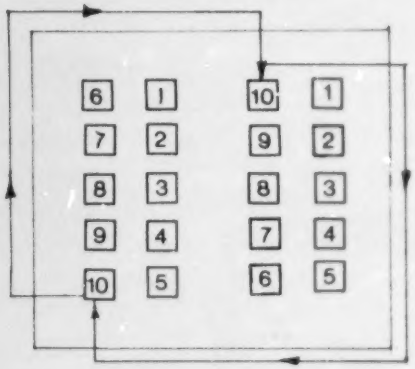


Fig. 6 Change Places

13. Name: Windmill and Jog
Equipment: None
Description: Have the student assume a standing position, feet apart, with arms extended sideward at shoulder level. On command, the student:
- Bends and twists his trunk, touching his left hand to his right toe.
- Returns to the starting position.
- Jogs around the gym and returns to the original floor position.
- Repeats the task.

Teaching Hints:

- Vary the task according to the endurance capacity of each student.
- Identify and correct bilaterality and/or flexibility problems.

Fig. 7 Windmill and Jog

14. Name: Cycling and Jogging
Equipment: None
Description: Have student assume the inverted cycling position on the floor. On command, the student:
- Completes twenty-five leg cycles (a cycle is the rotation of both legs).
- Runs five laps around the gym.
- Returns to the original cycling position.
- Repeats the task.

Teaching Hints:

- Vary the leg cycles and distance to be run.
- Keep the time constant and record the number of "circuits" completed by each student.
- Stress the safety factor – avoiding contact with running classmates.

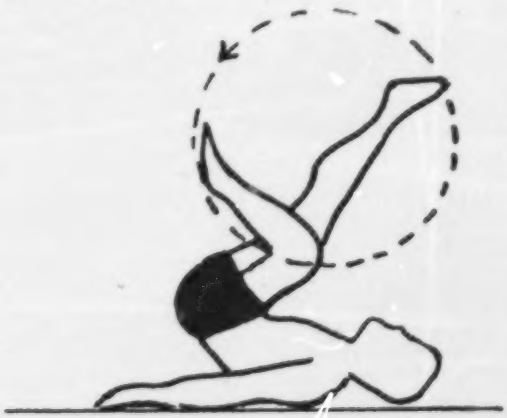


Fig. 8 Cycling and Jogging

15. Name: Mountain Climbing and Jogging
Equipment: None
Description: Have the student assume the starting position as in the illustration. On command, the student:
- Reverses his foot position for thirty cycles.
- Runs five laps around the gym.
- Returns to the original starting position.
- Repeats the task.

Teaching Hints:

- The same "hints" as cited in No. 14.

Fig. 9 Mountain Climbing and Jogging

16. Name: Jumping Jack
Equipment: None
Description: Have the student stand with feet together and hands at sides. On command, the student:
- Jumps and lands with feet apart.
- Simultaneously, moves arms sideward and upward, touching hands overhead.
- Returns to the starting position.
- Repeats the exercise.

Teaching Hints:
- Vary the number of repetitions and cadence.
- Increase the difficulty level by alternately having the student shift the feet sideward – together and staggered – together.
- If a student cannot perform the task have him perform the discrete parts by the numbers.

Fig. 10 Jumping Jack

17. Name: Rope Skipping
Equipment: Stop Watch, Jump Rope
Description: Explain and demonstrate the proper rope skipping technique. On command, the student:

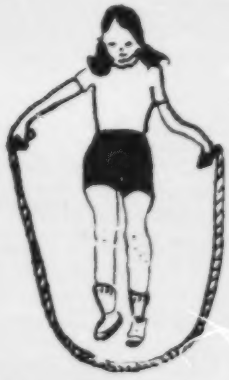


Fig. 11 Rope Skipping

- Skips rope for thirty seconds.
- Rests for thirty seconds.
- Repeats the exercise until he has skipped for 2:30 seconds and rested for 2:30 seconds.

Teaching Hints:
- Work up to a cadence of 120 jumps per minute.
- Increase the skipping time and decrease the resting time.
- Vary the task by having the student skip in reverse (i.e., bringing the rope over the head and behind the body).

18. Name: Bench Stepping
Equipment: Bench, Stairs, or Gymnasium Bleachers, Stop Watch
Description: Have the student stand upright facing the bench. On command, the student:
- Places his right foot on the bench.
- Brings up his left foot and stands erect.
- Lowers his right foot to the floor.
- Lowers his left to the floor.

(one cycle)
- Continues until he has completed sixty cycles in a two-minute period (thirty cycles per minute).

Teaching Hints:
- Keep the cadence constant by: clapping hands; counting 1, 2, 3, 4; or using music.
- Increase the time, at periodic intervals, by thirty seconds until the students can perform the task for five minutes.

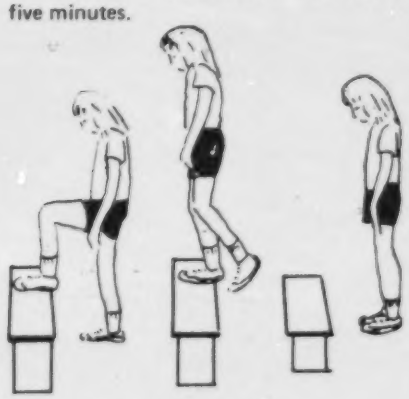


Fig. 12 Bench Stepping

19. Name: Circuit Training
Equipment: Timer
Description: Have the student assume an upright position. On command, the student:
- Hops on his left foot for 100 counts.
- Hops on his right foot for 100 counts.
- Jumps on both feet for 100 counts.
- Performs 100 jumping jacks.
- Runs in place for 100 counts.

(one circuit)
- Repeats the circuit.
- Completes as many circuits as possible in ten minutes.

Teaching Hints:

- Have the student keep a daily record of his performance; two circuits, plus three exercises would be recorded as 2.6.
- Encourage the student to better his score each day.

Fig. 13 Circuit Training

20. Name: Interval Running
Equipment: Tape for Measuring Distance, Stop Watch
Description: Interval running is a type of conditioning that uses the "overload concept." The student is overtaxed physiologically by being required to perform a series of running events which include a relaxation phase and a stress phase for a certain distance or a certain period of time. For example, the student might be requested to perform the following running events in a ten-minute period:
    - Walk rapidly for two minutes.
    - Jog for one minute.
    - Run at one-half speed for one minute.
    - Sprint for one minute.

    (one circuit)
    - Repeat the circuit.

    Teaching Hints:
    - The "overload concept" can be applied to any activity. Devise a circuit that applies interval stress to a series of exercises, the game of soccer, or swimming.
    - Increase the "overload" gradually by decreasing the "relaxation" phases of the circuit and increasing the "stress" phases.

21. Name: Road Runner
Equipment: Timer, Track or Large Area
Description: Students form one or more lines. On command, the students:
    - Jog slowly.
    - The last student sprints to the front of his line and begins to jog.
    - The process is repeated until all students have sprinted one time.

    Teaching Hints:
    - Vary the task according to the ability level of the students. For example, students with extremely poor endurance could walk in line, with the last person jogging to the front position.
    - Increase the jogging and sprinting distances as the students improve.
    - Decrease the time permitted to cover a given distance.

Fig. 14 Road Runner

22. Name: Suicide
Equipment: Timer, Basketball Court
Description: The student stands behind the baseline. On command, he:
    - Sprints to the near foul line, touches the line with his hand and sprints back to the baseline.
    - Touches the baseline and sprints to the half-court line and back.
    - Repeats to the far foul-line and back and far baseline and back.

    Teaching Hints:
    - Keep a record of all times and encourage students to "beat" their own time.
    - Have several students perform the activity at the same time; stress staying in their lane.
    - Use markers so the activity can be used in an all-purpose room, or out-of-doors.

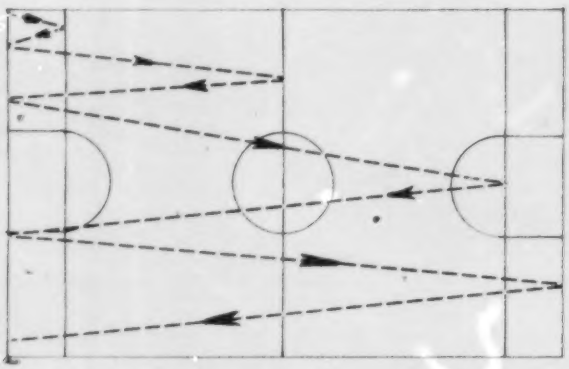
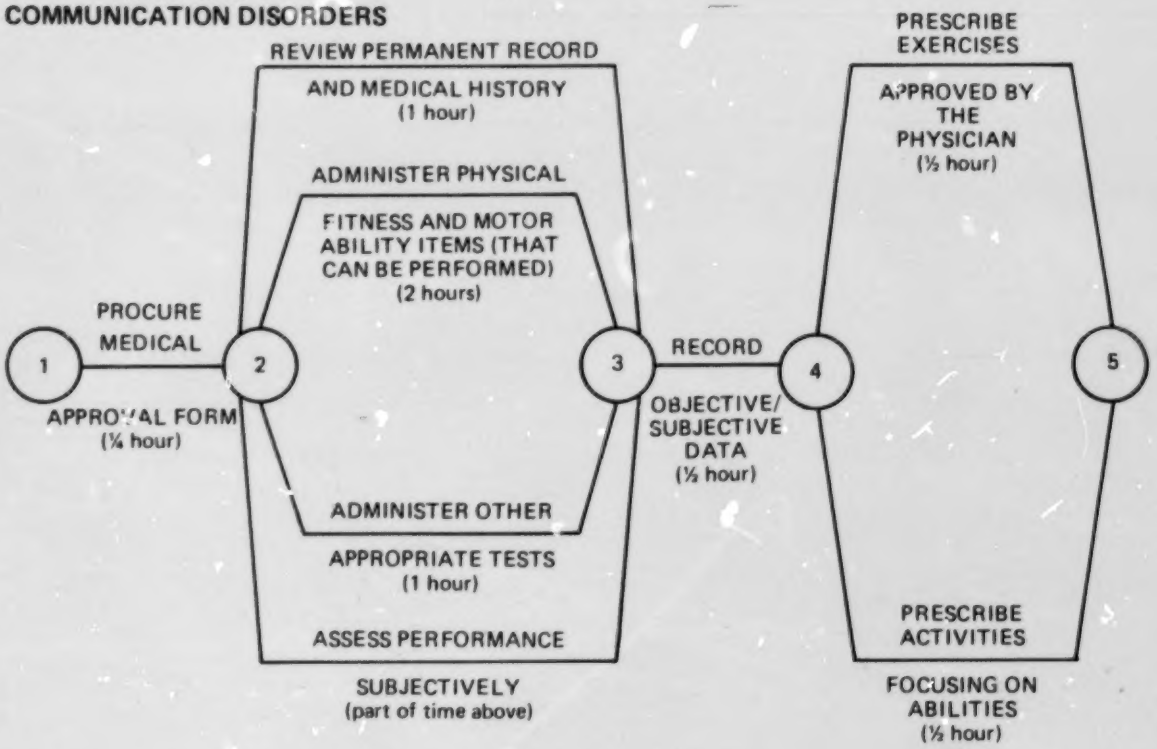


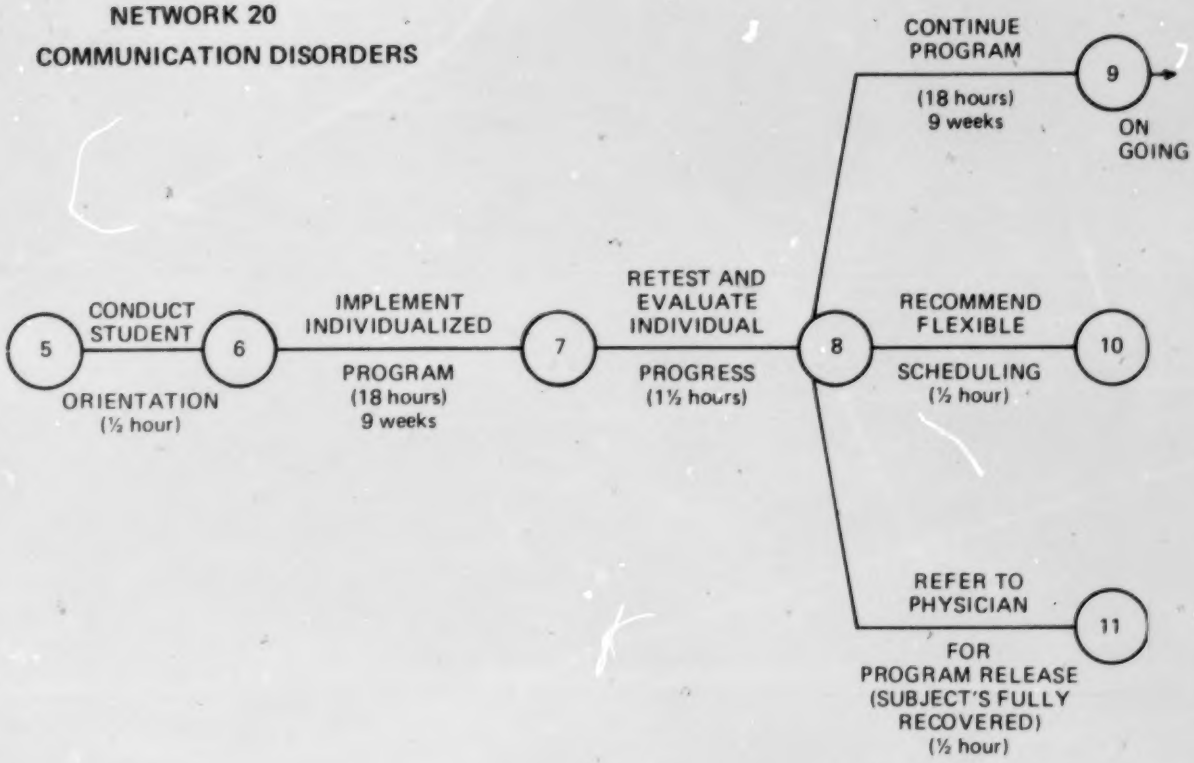
Fig. 15 Suicide

COMMUNICATIONS DISORDERS FLOW CHART AND ACTIVITY CHECKLIST

NETWORK 19
COMMUNICATION DISORDERS



NETWORK 20
COMMUNICATION DISORDERS



APPENDIX A (Continued)
ACTIVITY CHECKLIST

EVENT NUMBERS		ACTIVITY TIME	ACTIVITY DESCRIPTION	NETWORK NUMBERS	EXPLANATION
BEGINNING	ENDING				
1	11		IMPLEMENT PROGRAM FOR STUDENTS WITH COMMUNICATION DISORDERS	19	D&A Program will be provided for the partially-sighted, blind, hard-of-hearing, deaf, and autistic
1	2	¼ hour	Procure Medical Approval Form **Note:** The original form is to be filed in the nurse's office; a copy of the form is to be placed in the child's folder	19	Self-explanatory

APPENDIX A (Continued)
ACTIVITY CHECKLIST

EVENT NUMBERS		ACTIVITY TIME	ACTIVITY DESCRIPTION	NETWORK NUMBERS	EXPLANATION
BEGINNING	ENDING				
2	3	1 hour	Review Permanent Record and Medical History - Carefully check auditory and visual information	19	The D&A teacher will review the permanent record and medical history of every student in the program
2	3	2 hours	Administer Physical Fitness and Motor Ability Items - Keep a record of pre- and post-test progress	19	Students will be encouraged to perform those items that are within their ability levels
2	3	1 hour	Administer Other Appropriate Tests - Where appropriate, devise tests to assess peripheral vision, depth perception, and kinesthesis	19	Tests designed to assess progress in terms of "use of the senses" will be administered

APPENDIX A (Continued)
ACTIVITY CHECKLIST

EVENT NUMBERS		ACTIVITY TIME	ACTIVITY DESCRIPTION	NETWORK NUMBERS	EXPLANATION
BEGINNING	ENDING				
2	3	Part of time above	Assess Performance Subjectively	19	Self-explanatory
3	4	½ hour	Record Objective and Subjective Data	19	Self-explanatory
4	5	½ hour	Prescribe Exercises Approved by the Physician - Record prescribed exercises on each student's prescription card	19	The family or school physician *will* prescribe all exercises
4	5	½ hour	Prescribe Activities Focusing on Abilities - Post a list and discuss modified games and activities that have been approved by the physician or Child Study Team	19	The family, or school physician or Child Study Team will prescribe all games and activities
5	6	½ hour	Conduct Student Orientation - Explain rules and regulations, program values, etc.	20	Self-explanatory

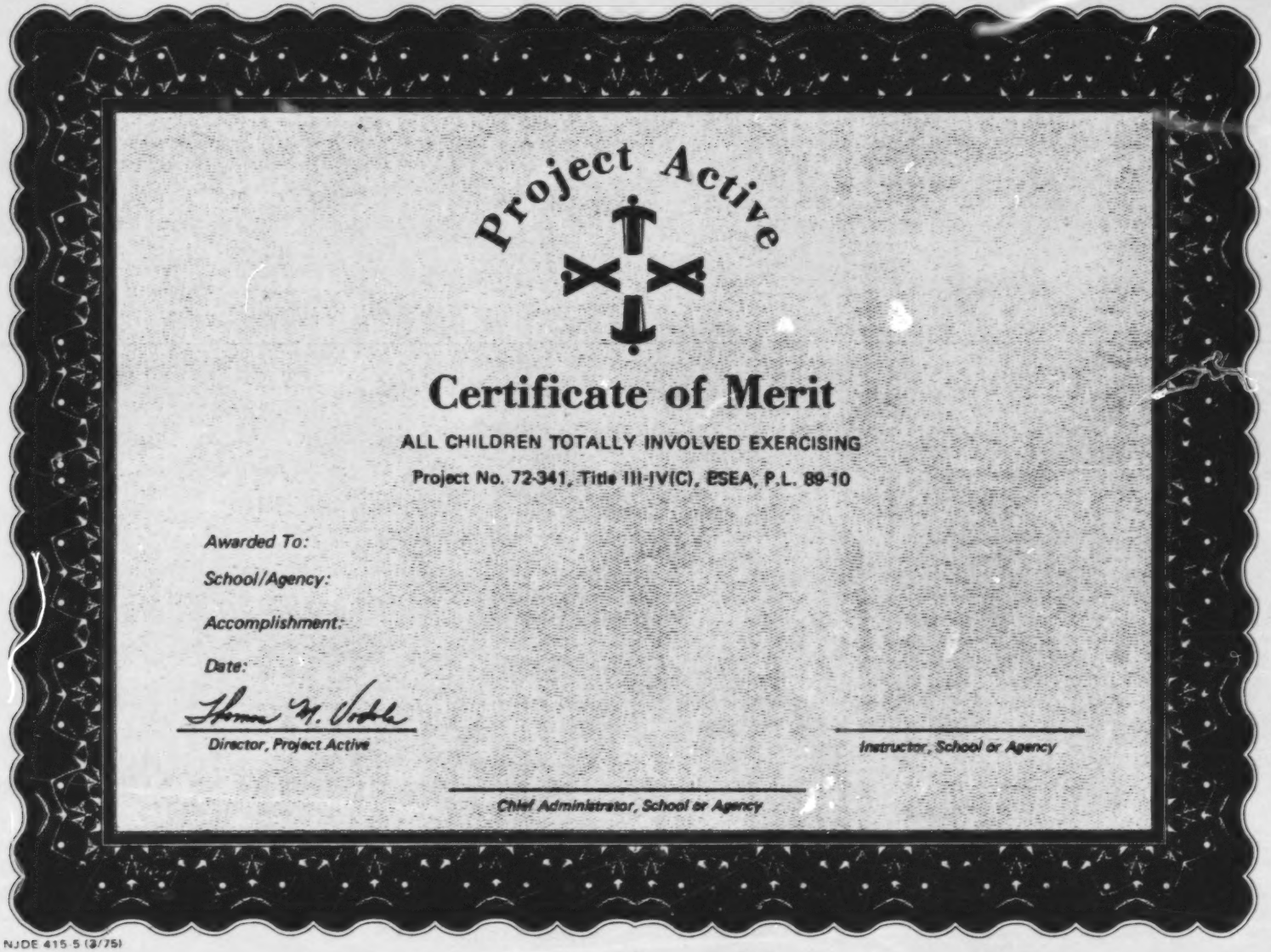
APPENDIX A (Continued)
ACTIVITY CHECKLIST

EVENT NUMBERS		ACTIVITY TIME	ACTIVITY DESCRIPTION	NETWORK NUMBERS	EXPLANATION
BEGINNING	ENDING				
			• Demonstrate correct testing technique • Prepare the necessary forms • Assist and conduct testing **Note:** Autistic children should be guided through all tests		
6	7	18 hours (9 weeks)	Implement Individualized Program • Provide an aide to work with each autistic child, utilize immediate, positive reinforcement for the slightest accomplishment	20	Each student will receive a program based on *his specific needs and interests*
7	8	1½ hours	Retest and Evaluate Individual Progress • Refer students to physician for possible release from the program	20	Students will be retested at nine-week intervals

APPENDIX A (Continued)
ACTIVITY CHECKLIST

EVENT NUMBERS		ACTIVITY TIME	ACTIVITY DESCRIPTION	NETWORK NUMBERS	EXPLANATION
BEGINNING	ENDING				
			(where results are supportive of such a recommendation)		
8	9	18 hours (9 weeks)	Continue Program • Consideration should be given to possible revision of exercises; stimulation of motivation, etc.	20	Self-explanatory
8	10	½ hour	Recommend Flexible Scheduling • Prepare and submit supportive evidence for your recommendation	20	Where possible, students will be scheduled in with their peer group
8	11	½ hour	Refer to Physician For Program Release • Prepare and submit supportive evidence for your recommendation	20	Students will not be returned to the unrestricted program unless they have a ***signed release*** from the family or school physician

APPENDIX B STUDENT'S CERTIFICATE OF MERIT



NJDE 415 5 (3/75)

The State of New Jersey

Department of Education

AND

PROJECT ACTIVE

ALL CHILDREN TOGETHER INVOLVED EXERCISING
Project No. 17-[illegible] (P.L. 89-10)

Hereby Acknowledges With Sincere Appreciation The Completion Of The Mini-Inservice Training Course For Physical Education, Special Education, And Recreation Teachers Working With Handicapped Children.

By

_____

This course consisted of ten four-hour sessions, lecture-demonstrations on individualizing instruction and practicum work experiences with handicapped children; and developing specific competencies.

Horace M. Voorhees
Project Director

Paul Tomaro
Branch of Special Education & Pupil Personnel Services

_____
Date

Sol E. Altman
Physical Education Consultant

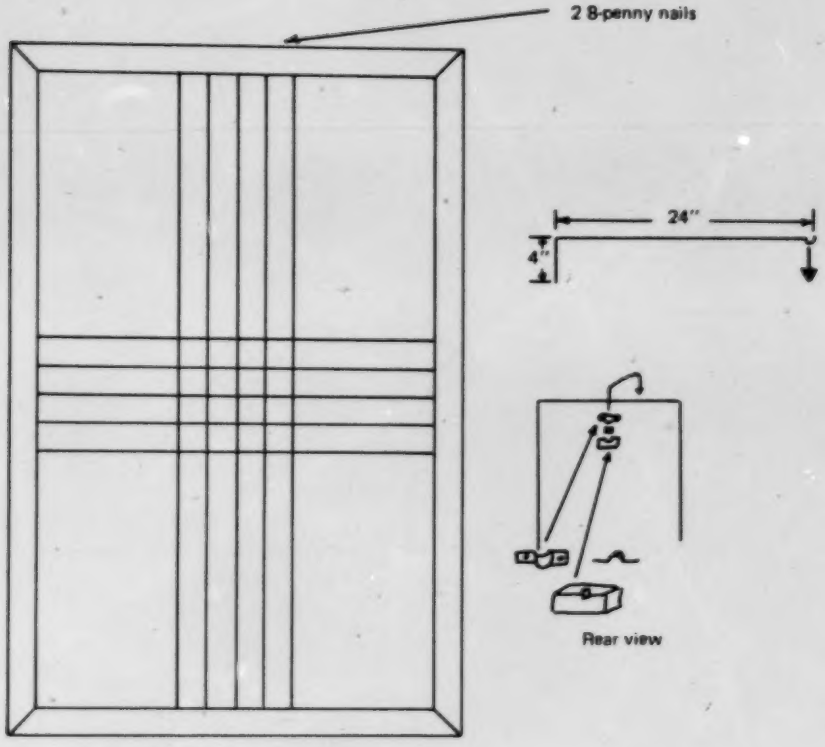
NJDE 401-16 (12/74)

APPENDIX D

POSTURE SCREENING GRID CONSTRUCTION DIRECTIONS

(Courtesy of the Township of Ocean School District)

CONSTRUCTABLE ITEMS



Materials needed:

Grid: one 1/8" x 4' x 8' masonite
Frame: one 3/4" x 3" x 24'
Rod: one 3/8" x 30"
Clamps: two
Wooden block: one 1" x 4"
Plumb bob: one
Paint:
1 quart of flat black enamel
1 pint of fast-drying white lacquer
Striping tool: one
Straight edge: 8' long, 3" wide

Instructions:

1. Reduce masonite to proper size.
2. Paint masonite.
3. Place frame on masonite; secure with 3/4" roofing nails (miter corners).
4. Draw horizontal and vertical lines. Start at midpoint and paint lines 2" apart with the striping tool. Be sure to secure the straight edge to the frame with clamps to insure straight lines
5. Touch up any overrun of striping with black enamel border.

APPENDIX E

GUIDE
TO THE
EVALUATION
OF
POSTURE AND BODY ALIGNMENT

The evaluation of body alignment and posture by the evaluator helps to serve a dual purpose:

Purpose I:

To acquaint the examiner with postural deviations of the individual and thereby serve as a guide for the exercise program.

Purpose II:

To provide a record for the future reference from which to evaluate progress or change in body alignment.

Cherry Hill Public Schools
Mr. Al Daniel
Department of Physical Education
Developmental Physical Education

Permission to publish granted.

APPENDIX E (Continued)

EVALUATION OF BODY ALIGNMENT AND POSTURE

A. Notations on screening form.

1. The name of each child should be clearly PRINTED.
2. Age of the child should be recorded in years and months.
3. Name of school is clearly indicated.
4. Record weight accurately.
5. Record height in inches.
6. Leg length record in inches – be careful to place correct measurements with correct leg.
7. Record all other anthropometric measurements carefully.
8. In "remarks area" make notations of past and present history from student which may have a bearing on posture and body alignment evaluation.
9. Record correct date of examination.

B. Screening Procedure.

1. Boys should be screened in gym shorts.
2. Girls should be screened in bathing suits or any other suitable attire to allow efficient evaluation.
3. No footwear or socks should be worn by students.
4. In evaluating the student for postural deviation "O" is ideal and any slight deviation from this is considered normal and should not be recorded.
5. Adjust the student's stance without attempting to correct a postural deviation in order to allow the best evaluation by the evaluator.
6. Use a red pencil for initial screening to indicate first observations, and do not hesitate to record on the figure and deviations noted.
7. Leg length is measured from the anterior superior spine of the ilium to the internal malleolus.
8. Calf circumference is measured 4-5 inches below the inferior tip of the patella (mid-calf). (Measurements taken with steel tape.)
9. Thigh circumference is measured 6 inches above the superior tip of the patella (mid-thigh). (Measurements taken with steel tape.)
10. All skinfold measurements are made on the RIGHT side of the body. Apply the calipers about 1 cm. from the fingers holding the skinfold and at a depti approximately equal to the thickness of the fold. All folds are taken in the vertical plane except when the lines of Linn result in torsion of the skinfold in which case it is taken along these lines:
    (a) Chest – Midpoint between the anterior crease of the ancilla and the nipple.
    (b) Abdomen – adjacent to the umbilicus.
    (c) Arm – Midposterior midpoint between the tip of the acromion and the tip of the olecranon with the elbow in 90° flexion, and with the extremity hanging straight in an extended position.
    (d) Back – Tip of the scapula with the subject in a relaxed standing position.
11. Grip strength – Taken with a grip dynamometer, be careful of placement of dynamometer – scale should be facing out.

REAR VIEW

Plumbline should bisect the body into two equal parts as in form II.

A. Head

1. Tilt – head may slant toward one side or the other, evaluator may indicate on figure.

B. Shoulder level

1. One higher than the other, evaluator may indicate on figure. (Use horizontal grid lines as a guide.)

C. Shoulder blades

1. The inferior angle of the scapula is normal at the level of the seventh thoracic vertebral spinous process.
2. "Winging" of the scapula – the vertebral border is pulled away from the posterior back or spinal processes of the vertebrae.

D. Upper and Lower spine

1. Mark direction of convexity.
2. In reference to "C" curve the examiner will mark both upper and lower spine in direction.
3. In reference to "S" curve please mark convexity carefully.

E. Hip level

1. Use horizontal gird lines as a guide.
2. If in doubt as to lack of prominence of hip bones, the examiner may place hands on crest of ilium and observe any difference in level of hands.

F. Ribs

1. The student stands upright. The examiner, using the index and middle fingers, rubs briskly over the spinous process of the vertebrae from the neck to the hips. Check for spinal deviations.
2. The student now stands with the trunk flexed at the hips, upper body parallel to the floor, the examiner then observes the contour development of ribs from the rear. Note any differences of rib growth and/or lack of symmetry.

G. **Legs**
1. Note only knock-knee or bowed legs.

H. **Popliteal line**
1. At rear of knee level is an indentation of break in contour of skin where knee is flexed in movement, check level behind each leg.

I. **Pronation**
1. Achilles tendon is straight, note any deviation from this norm.

SIDE VIEW

Remember, check total body alignment before making segmented evaluation.

A. **Head** *(plumbline through lobe of ear)*
1. Head in front of plumbline – indicate (head forward).
2. Head back of plumbline – indicate (head backward).

B. **Shoulders** *(plumbline through center of shoulder joint).*
1. "Cupping" inward movement of shoulders toward sternum (Kyphosis).
2. "Winging" of scapula, this refers to prominence of the inferior angle of the scapula or in some cases the entire vertebral border, posteriorly. (Muscular development may cause false winging.)

C. **Spine** *(no exaggeration of spine curvatures.)*
1. Upper spine curvature.
2. Lower spine curvature (Lordosis). Exaggerated lumber curve often associated with an anterior tilt of the pelvis.
3. Try to visualize long skeleton.
4. Check at this point if the student is leaning backwards.

D. **Hip** *(plumbline through greater trochanter of the femur).*
1. Flexion (indicated two ways).
   (a) Student stands with the knees straight and the trunk is flexed forward at the hip.
   (b) Student stands with knees flexed associated with hip flexion and trunk upright.

E. **Knee** *(plumbline posterior to the patella).*
1. Flexion – knee joint is flexed and may be anterior to the plumbline.
2. Hyperextension – knee joint forms an open angle and is posterior to the plumbline.

F. **Body**
1. Forward – most of body forward of line.
2. Backward – most of body back of line.
3. Bowed – midsection more anterior than upper and lower portions of the body.

G. **Arch Depression**
1. Try to visualize a line from just below the medial malleolus to the proximal end of the 1st phalange of the big toe, then check scaphoid (Talus) bone and its relationship to line and floor.

GLOSSARY

1. Anterior superior spine – front, upper part of the hip. (illium)
2. Patella – a round sesamoid bone in front of the knee
3. Inferior – lower
4. Superior – the upper part
5. Malleolus – the lower end of the fibula (ankle)
6. Seventh thoracic vertebrae – the middle area of the back on a line with the lower angle of the scapula
7. Spinal processes – pertaining to the spine – part palpated in the back
8. Pronation – the downward turning of the part
9. Posteriorly – toward the rear
10. Talus (Scaphoid) – the "heel" bone of the ankle
11. Proximal – nearest
12. Acromion – the process at the summit of the scapula
13. Olecranon – large process forming the head of the ulna
14. Scapula – large flat triangular bone of the shoulder
15. Grip dynamometer – instrument for measuring muscular strength

APPENDIX F

WEAR ATTITUDE AMINISTRATION FORMS AND SCORING PROCEDURES

Form A

1. If for any reason a few subjects have to be dropped from the school program, physical education should be one of the subjects dropped.
2. Physical education activities provide no opportunities for learning to control the emotions.
3. Physical education is one of the most important subjects in helping to establish and maintain desirable social standards.
4. Vigorous physical activity works off harmful emotional tensions.
5. I would take physical education only if it were required.
6. Participation in physical education makes no contribution to the development of poise.
7. Because physical skills loom large in importance in youth, it is essential that a person be helped to acquire and improve such skills.
8. Calisthenics taken regularly are good for one's general health.
9. Skill in active games or sports is not necessary for leading the fullest kind of life.
10. Physical education does more harm physically than it does good.
11. Associating with others in some physical education activity is fun.
12. Physical education classes provide situations for the formation of attitudes which will make one a better citizen.
13. Physical education situations are among the poorest for making friends.
14. There is not enough value coming from physical education to justify the time consumed.
15. Physical education skills make worthwhile contributions to the enrichment of living.
16. People get all the physical exercise they need in just taking care of their daily work.
17. All who are physically able will profit from an hour of physical education each day.
18. Physical education makes a valuable contribution toward building up an adequate reserve of strength and endurance for everyday living.
19. Physical education tears down sociability by encouraging people to attempt to surpass each other in many of the activities.
20. Participation in physical education activities makes for a more wholesome outlook on life.
21. Physical education adds nothing to the improvement of social behavior.
22. Physical education class activities will help to relieve and relax physical tensions.
23. Participation in physical education activities helps a person to maintain a healthful emotional life.
24. Physical education is one of the more important subjects in the school program.
25. There is little value in physical education as far as physical well-being is concerned.
26. Physical education should be included in the program of every person.
27. Skills learned in a physical education class do not benefit a person.
28. Physical education provides situations for developing desirable character qualities.
29. Physical education makes for more enjoyable living.
30. Physical education has no place in modern education.

Form B

1. Associations in physical education activities give people a better understanding of each other.
2. Engaging in vigorous physical activity gets one interested in practicing good health habits.
3. The time spent in getting ready for and engaging in a physical education class could be more profitably spent in other ways.
4. A person's body usually has all the strength it needs without participation in physical education activities.
5. Participation in physical education activities tends to make one a more socially desirable person.
6. Physical education in schools does not receive the emphasis that it should.
7. Physical education classes are poor in opportunities for worthwhile social experiences.
8. A person would be better off emotionally if he did not participate in physical education.
9. It is possible to make physical education a valuable subject by proper selections of activities.
10. Developing a physical skill brings mental relaxation and relief.
11. Physical education classes provide nothing which will be of value outside the class.
12. There should not be over two one-hour periods per week devoted to physical education in schools.
13. Belonging to a group, for which opportunity is provided in team activities, is a desirable experience for a person.
14. Physical education is an important subject in helping a person gain and maintain all-round good health.

Source: C.L. Wear, "Construction of Equivalent Forms of An Attitude Scale," *Research Quarterly*, XXV (1955) pp. 113-119.

APPENDIX F (Continued)

15. No definite beneficial results come from participation in physical education activities.
16. Engaging in group physical education activities is desirable for proper personality development.
17. Physical education activities tend to upset a person emotionally.
18. For its contributions to mental and emotional well-being physical education should be included in the program of every school.
19. I would advise anyone who is physically able to take physical education.
20. As far as improving physical health is concerned a physical education class is a waste of time.
21. Participation in physical education class activities tends to develop a wholesome interest in the functioning of one's body.
22. Physical education classes give a person an opportunity to have a good time.
23. The final mastering of a certain movement or skill in a physical education class brings a pleasurable feeling that one seldom experiences elsewhere.
24. Physical education classes provide values which are useful in other parts of daily living.
25. Physical education contributes little toward the improvement of social behavior.
26. Physical education should be required of all who are physically able to participate.
27. The time devoted to physical education in schools could be more profitable used in study.
28. The skills learned in a physical education class do not add anything of value to a person's life.
29. Physical education does more harm socially than good.

APPENDIX F (Continued)

WEAR ATTITUDE INVENTORY SCORE SHEET

FORM A & FORM B (CIRCLE ONE)

PRINT FULL NAME _____ GRADE _____ DAYS & PERIOD _____ DATE _____ INSTRUCTOR _____

	N*	VALUE
5		
4		
3		

	N	VALUE
2		
1		
TOTAL		

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	( )	( )	( )	( )	( )
2.	( )	( )	( )	( )	( )
3.	( )	( )	( )	( )	( )
4.	( )	( )	( )	( )	( )
5.	( )	( )	( )	( )	( )
6.	( )	( )	( )	( )	( )
7.	( )	( )	( )	( )	( )
8.	( )	( )	( )	( )	( )
9.	( )	( )	( )	( )	( )
10.	( )	( )	( )	( )	( )
11.	( )	( )	( )	( )	( )
12.	( )	( )	( )	( )	( )
13.	( )	( )	( )	( )	( )
14.	( )	( )	( )	( )	( )
15.	( )	( )	( )	( )	( )
16.	( )	( )	( )	( )	( )
17.	( )	( )	( )	( )	( )
18.	( )	( )	( )	( )	( )
19.	( )	( )	( )	( )	( )
20.	( )	( )	( )	( )	( )
21.	( )	( )	( )	( )	( )
22.	( )	( )	( )	( )	( )
23.	( )	( )	( )	( )	( )
24.	( )	( )	( )	( )	( )
25.	( )	( )	( )	( )	( )
26.	( )	( )	( )	( )	( )
27.	( )	( )	( )	( )	( )
28.	( )	( )	( )	( )	( )
29.	( )	( )	( )	( )	( )
30.	( )	( )	( )	( )	( )

*Example:	N	VALUE
5	卌 |	30
4	||	8

APPENDIX F (Continued)

WEAR ATTITUDE INVENTORY SCORING KEY

(FORM A) & FORM B (CIRCLE ONE)

PRINT FULL NAME _____ GRADE _____ DAYS & PERIOD _____ DATE _____ INSTRUCTOR _____

	N*	VALUE		N	VALUE
5			2		
4			1		
3			TOTAL		

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	5	4	3	2	1
2.	5	4	3	2	1
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	5	4	3	2	1
6.	5	4	3	2	1
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	5	4	3	2	1
10.	5	4	3	2	1
11.	1	2	3	4	5
12.	1	2	3	4	5
13.	5	4	3	2	1
14.	5	4	3	2	1
15.	1	2	3	4	5
16.	5	4	3	2	1
17.	1	2	3	4	5
18.	1	2	3	4	5
19.	5	4	3	2	1
20.	1	2	3	4	5
21.	5	4	3	2	1
22.	1	2	3	4	5
23.	1	2	3	4	5
24.	1	2	3	4	5
25.	5	4	3	2	1
26.	1	2	3	4	5
27.	5	4	3	2	1
28.	1	2	3	4	5
29.	1	2	3	4	5
30.	5	4	3	2	1

*Example:	N	VALUE
5	IIII	30
4	II	8

Instructions:

1. Punch out all areas enclosed by parentheses marks.
2. Place "scoring key" over student's answer sheet.
3. Compute student's total score for all items.

APPENDIX F (Continued)

WEAR ATTITUDE INVENTORY SCORING KEY

FORM A & (FORM B) (CIRCLE ONE)

PRINT FULL NAME _____ GRADE _____ DAYS & PERIOD _____ DATE _____ INSTRUCTOR _____

	N*	VALUE
5		
4		
3		

	N	VALUE
2		
1		
TOTAL		

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	5	4	3	2	1
4.	5	4	3	2	1
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	5	4	3	2	1
8.	5	4	3	2	1
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	5	4	3	2	1
12.	5	4	3	2	1
13.	1	2	3	4	5
14.	1	2	3	4	5
15.	5	4	3	2	1
16.	1	2	3	4	5
17.	5	4	3	2	1
18.	1	2	3	4	5
19.	1	2	3	4	5
20.	5	4	3	2	1
21.	1	2	3	4	5
22.	1	2		4	5
23.	1	2	3	4	5
24.	5	4	3	2	1
25.	1	2	3	4	5
26.	1	2	3	4	5
27.	5	4	3	2	1
28.	5	4	3	2	1
29.	5	4	3	2	1

*Example:

	N	VALUE
5	IHII	30
4	II	8

Instructions:

1. Punch out all areas enclosed by parentheses marks.
2. Place "scoring key" over student's answer sheet.
3. Compute student's total score for all items.

APPENDIX G

PROJECT ACTIVE
SUPPLY AND EQUIPMENT NEEDS FOR PROGRAM IMPLEMENTATION

To: Adopting School Districts/Agencies

From: Dr. Thomas M. Vodola, Director, Project ACTIVE

Re: Supply/Equipment Needs for Program Implementation

The appended tables provide specific information relative to supply and equipment needs for program installation. The format has been designed to facilitate the identification of items for those who are adopting or adapting one phase of the program, or the total program. The information supplied includes:

- The specific item
- Essential items needed (coded with an "N")
- The number of items needed
- Items recommended (coded with an "R")
- The unit price of each item
- The source of the item

The tables reflect the basic needs for implementing the program in one school. It is recommended that one set be purchased for each additional school involved. (If a district has some of the items on hand, it obviates the need for that expenditure.)

Project Director
Thomas M. Vodola, Ed.D.
Township of Ocean School District
Ocean Township Elementary School
Dow Avenue
Oakhurst, N.J. 07755
201–229-4100 Ext. 260

APPENDIX G (Continued)

PROJECT ACTIVE SUPPLY/EQUIPMENT NEEDS[1]

COMPONENT ADOPTED ITEMS	TOTAL PROGRAM				Items Needed	LOW MOTOR ABILITY		LOW PHYSICAL VITALITY		NUTRITIONAL DEFICIENCIES		BREATHING PROBLEMS		POSTURAL ABNORMALITY		MOTOR DISABILITIES		COMMUNICATION DISORDERS	
	N	R	Cost	Source		N	R	N	R	N	R	N	R	N	R	N	R	N	R
PC5026 Shoulder Breadth, Length Caliper	X		74.90	J.A. Preston Corp. 71 Fifth Avenue N.Y., N.Y. 10003	1					X									
PC5028 Large Skinfold (Fat Caliper)	X		142.45	J.A. Preston	1					X									
PC5155 Dry Spirometer	X		176.85	J.A. Preston	1							X							
PC5156 Disposable Paper Mouthpieces	X		31.60	J.A. Preston	500							X							
PC5059 Flexometer		X	246.65	J.A. Preston	1														
or PC5054 Plastic Goniometer (Transparent)	X		20.20	J.A. Preston	1											X			
PC5022A Symmetrigraf (Posture Grid)	X		80.60	J.A. Preston	1									X					
No. 305 Stall Bars, Starter Unit (optional)		X		Nissen Corp. 930 27th Ave. Cedar Rapids, Iowa	1										X				
No. 39 Wall Mounted Horizontal Ladder (optional)		X		Nissen Corp.	1										X				
or Construct Horizontal Ladder (optional)		X		Maintenance Dept.	1										X				X
No. 92602 Utility Playground Ball, PG8½	X		3.00	J.L. Hammett Co. 2393 Vaux Hall Rd. Union, N.J. 07083	12	X										X			
No. 92655 Fun Balls (Plastic) S-650	X		.55	J.L. Hammett Co.	12	X										X			

[1] Contact source for unlisted prices.

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APPENDIX G (Continued)

PROJECT ACTIVE SUPPLY/EQUIPMENT NEEDS

COMPONENT ADOPTED ITEMS	TOTAL PROGRAM				Items Needed	LOW MOTOR ABILITY		LOW PHYSICAL VITALITY		NUTRITIONAL DEFICIENCIES		BREATHING PROBLEMS		POSTURAL ABNORMALITY		MOTOR DISABILITIES		COMMUNICATION DISORDERS	
	N	R	Cost	Source		N	R	N	R	N	R	N	R	N	R	N	R	N	R
No. 92670 Saf-T Bat (Plastic) No. 705	X		2.25	J.L. Hammett Co.	3	X										X			
Plastic Measuring Tape 36"	X			Local Fabric Shop				X		X				X					
White Shoe Polish, Bottle	X		.55	Local Supermarket	3	X		X						X		X			
No. 39170 Water Color Marking Pen, Black	X		.40	J.L. Hammett	1									X					
No. 61145 Pegboard and Pegs, No. 7615 (optional)		X	3.45	J.L. Hammett	6 sets		X										X		
PEC1064 Walk-On Letters	X		29.85	J.A. Preston	1 set	X													
No. 9201 Audible Ball Electronic	X			Royal Nat'l. Inst. for the Blind, 224-6-8 Great Portland St. London, W-1, England	1													X	
No. 92663 Audi-Ball, No. AB-30 (optional)		X		J.L. Hammett	1													X	
No. 1-0357 Staley Sports Field Kit (optional)				American Printing House for the Blind 1839 Frankfort Ave. P.O. Box 6085 Louisville, Kentucky 40206	1														
No. 1-0304 Portable Audible Goal Locator		X		American Printing House for the Blind	1													X	
Barbells		X		J.L. Hammett	1				X		X				X		X		

APPENDIX G (Continued)

PROJECT ACTIVE SUPPLY/EQUIPMENT NEEDS

COMPONENT ADOPTED ITEMS	TOTAL PROGRAM				Items Needed	LOW MOTOR ABILITY		LOW PHYSICAL VITALITY		NUTRITIONAL DEFICIENCIES		BREATHING PROBLEMS		POSTURAL ABNORMALITY		MOTOR DISABILITIES		COMMUNICATION DISORDERS	
	N	R	Cost	Source		N	R	N	R	N	R	N	R	N	R	N	R	N	R
Stopwatch	X			J.L. Hammett	1	X		X		X		X							
PEC2747A Beanbag Game		X	50.45	J.A. Preston	2												X		
PEC2747B Beanbag Set		X	32.40	J.A. Preston	1												X		
Chinning Bar	X			Nissen Corp.	2			X							X		X		X
Mats, 5' x 10'	X			Nissen Corp.	3	X		X				X		X		X		X	
No. 92882 Number 3 Fleece Balls	X		1.50	J.L. Hammett	3	X										X		X	
No. 92645 Number CT850 Endure Tetherball	X		10.90	J.L. Hammett	1	X										X			
PEC4806 Walk-On Number Kit	X		17.85	J.A. Preston	1 set	X													
No. 92656 Number S-630 Fun Balls	X		.40	J.L. Hammett	12	X										X			
No. 84252 Rubber Quoit Set	X		5.65	J.L. Hammett	1 set	X													
No. 60676 Footsteps to Numbers, 6076	X		8.00	J.L. Hammett	1 set	X													
No. 92730 Jump Rope (7')	X		1.30	J.L. Hammett	6			X		X		X							
Shape O Ball		X		Tupperware Products	1	X													X
PEC2600 Doorway Chinning Bar		X	14.95	J.A. Preston	1				X									X	
PEC2766A Deluxe Safe-T-Play Batting Set		X	56.90	J.A. Preston	1		X											X	
PEC2771B Pitch Back		X		J.A. Preston	1		X												
Masking Tape		X		Local Store	6 roll		X											X	

APPENDIX G (Continued)

PROJECT ACTIVE SUPPLY/EQUIPMENT NEEDS

COMPONENT ADOPTED ITEMS	TOTAL PROGRAM				Items Needed	LOW MOTOR ABILITY		LOW PHYSICAL VITALITY		NUTRITIONAL DEFICIENCIES		BREATHING PROBLEMS		POSTURAL ABNORMALITY		MOTOR DISABILITIES		COMMUNICATION DISORDERS	
	N	R	Cost	Source		N	R	N	R	N	R	N	R	N	R	N	R	N	R
LP6050 Coordination Skills		X	12.95	Kimbo Educational P.O. Box 246 Deal, N.J. 07723	1		X												
EA606 7 Developing Perceptual Motor Needs		X	12.95	Kimbo Educational	1		X												
EA605 Developing Body Awareness		X	6 50	Kimbo Educational	1		X										X		X
EA655 Relaxation		X	6.50	Kimbo Educational	1		X						X		X		X		X
EA657 Dynamic Balance		X	12.95	Kimbo Educational	1		X												X
EA658 Balance Beam Activity		X	12.95	Kimbo Educational	1		X												
EA656 Pre-Tumbling Skills		X	12.95	Kimbo Educational	1		X												X
LP5000 Developing Body Space Perception Motor Skills CM1056, 1058, 1079		X	15.75	Kimbo Educational	1		X										X		X
LP5000 Teaching Children Mathematics through Games		X	12.95	Kimbo Educational	1		X												
LP8060 To Move Is To Be		X	12.95	Kimbo Educational	1		X												
LP4000 Rhythmic Rope Jumping		X	10.95	Kimbo Educational	1		X		X		X		X						X
4032 34 Developing Exercises		X		Dance Records, Inc. Waldwick, N.J. 07463	1				X				X						
4008 Elementary School Exercises to Music		X		Dance Records, Inc.	1		X		X				X						X
Foot Disinfectant	X			Local Drug Store	1 Gal									X				X	

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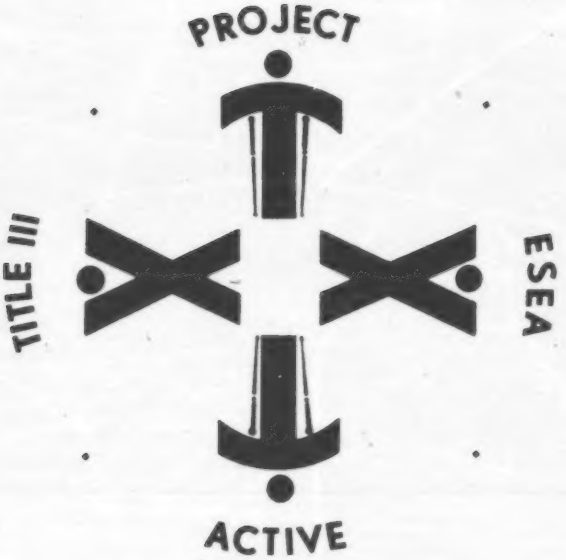
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